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Successful Teaching Is the Way to Successful Learning in Higher Educational Institutions of the United States:

A Grounded Theory Study

A Dissertation

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Abstract

Successful Teaching Is the Way to Successful Learning in Higher Educational Institutions of the United States: A Grounded Theory Study

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Drexel University, September 2017

Chairperson: Joy Phillips

University students' engagement in learning in the higher educational establishments has become a concern of policymakers. The purpose of this study was to generate a theory that would explain the influence of academics' pedagogies on the university students' engagement in learning. The central problem was that, given the growing demand for meaningful and relevant teaching in four-year universities, a description was needed of the pedagogies currently practiced by faculty members and how they consider reshaping those teaching methods to respond to student engagement challenges. This study focused on providing the answers to questions of what teaching methods professors are using to provide meaningful and relevant teaching for students, how faculty members described student responses to pedagogies that bring meaning and relevance to learning, and what professional development resources would facilitate reshaping the current pedagogy. A grounded theory approach led to findings about pedagogy that is responsive to and creative of student engagement.

The three theoretical subcategories revealing how teaching affects learning that emerged during the study were Awesome teacher, Star student, and Wisdom process. The

core category of relationship between teaching and learning led to the formulation of the grounded Uniform Excellence theory. The study provided recommendations for further research, for pedagogical experts, and for educational authorities.

DEDICATIONS

My dissertation was galvanized by my family when I was at the age of a passionate pilgrim. My brother called me “a doctor” because I was a rare child from a baby boomer cohort who owned a bike, and was traveling to see friends like a local doctor. The real expectation was that ultimately I would defend my dissertation in teaching and receive a doctoral degree.

My devoted mother encouraged me to share my expertise with other professionals in the field. My brilliant father-polyglot used to advise me, “Theory comes first! What you propagate should be grounded or argumented.” My dear parents and brother did not live to see my dissertation. There is a well-known biblical phrase, “Each man’s life is but a breath”. Their breath was strong. They influenced the community and myself in the most positive way. I pray God to present them with the most precious gift—eternal life. Every day of my life I repeat famous Shakespeare’s words “My father’s wit, and my mother’s tongue, assist me.”

During my journey I experienced findings and losses. My support was my husband with his heart of Prometheus. My sons expressed their royalty by keeping major duties and responsibilities. My family have been so dedicated to me that my dissertation is dedicated to my family.

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A learner with the simplest, a teacher of the thoughtfullest,

A novice beginning yet experient of myriads of seasons…

—Walt Whitman, Song of Myself

After a long period of six years, this nice September day becomes very special because I can present my dissertation that is not only the research done but also a summary of my professional experience and my personal life, too. I cannot but extend my gratitude to people who accompany me throughout my life. It is my big honor and great pleasure to be acquainted with such amazing folks. I trust them because they never "put me on pedestal" in my presence and create the atmosphere of obstruction in my absence. They are overly demanding of themselves and of me. I am happy that I live in the company of perfectionists who know the right way to think, act, and influence.

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Glory to You, Lord, for sending me such teachers and friends!

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Chapter 1: Introduction to the Research

Introduction to the Problem

Every fall students across the United States begin the journey to a bachelor's degree. According to Johnson, Rochkind, Ott, and DuPont (2009), half of the students do not complete the course and do not receive an undergraduate degree. The 2013 National Center for Education Statistics (NCES) reports that in 2011–12, 18.1 million undergraduate students attended 2,560 four-year institutions. "The 2011 graduation rate for full-time, first-time undergraduate students who began their pursuit of a bachelor's degree at a 4-year degree-granting institution in fall 2005 was 59 percent" (p. 182). The 2017 National Center for Education Statistics (NCES) reports, "About 59 percent of students who began seeking a bachelor's degree at a 4-year institution in fall 2009 completed that degree within 6 years" (p. 268).

Multiple researchers are looking for the reasons why students do not persist to graduation (Braxton, 2000; Kuh, Kinzie, Schuh, & Whitt, 2005; Moxley, Najor-Durack, & Dumbrigue, 2001; Seidman, 2005; Tinto, 1993). This problem becomes a major concern of national policymakers who stress the fact that the US is declining in student educational achievement compared with other countries. Higher education organizations also seek the answer to the question. For example, Western Association of Schools and Colleges (WASC) collects and systematizes data on graduation rates. WASC report (2010) states that President Barack Obama has challenged colleges and universities to engage in an effort to "better support and prepare our workers—not just for the jobs of today, but for the jobs five years from now and 10 years from now and 50 years from now" (p. 2). The 2013 WASC Handbook relates retention and degree completion to

student success and stresses that "student success includes quality of learning" (p.56) where "academic support can play a particularly critical role" (p. 2).

This research looked at one factor of academic support influencing retention and graduation. It is faculty-student collaboration demonstrated through relationship and interdependence between teaching and learning. As it was noted, "What students learn is greatly influenced by how they are taught" (NRC, 1996). The research intends to enrich a national data network by suggesting optimal ways of preparing higher education instructors with student responsive pedagogies. The study made an attempt to provide evidence that one of the reasons that students are not successful, in the sense that they do not meet a minimum grade average requirement when learning, is the professors' failure to use the appropriate teaching methodology.

The North Valley University Addendum to the Report of the Retention and Advising Task Force "Building relationships: Approaches to enhancing retention and advising" (2012-2013) paid particular attention to the relationship between students, departments, and academic advisors. The researcher looked at the data related to the problem of retention. The Addendum (2012-2013) reported that the university established ways through which students could be advised. There was no mention how faculty were going to solve the problem during actual classroom sessions. The retention rate of the North Valley University students is very high after the first year of studies, eighty-nine per cent. However, the graduation rate within four years at the North Valley University is nineteen per cent, according to the College Board report. The university data showed that fifty-eight per cent of undergraduates earn diplomas within six years in school, which is still far from the eighty-nine per cent of students who stayed with the university after the

first year. What reasons cause the retention decline that happens from the sophomore to the graduate level had not been investigated.

This research intended to analyze what reasons impact the retention of students and what ways lead to the improvement. According to Tinto (1993), the most well-known student retention theorist, only 20 to 30 per cent of students leave schools for academic reasons. The remaining 70 to 80 percent leave for other reasons: failure to adjust; inability to determine goals; lack of commitment; insufficient finances; inability to become integrated; incongruence as mismatch between personal and institutional needs; and isolation as lack of interaction with faculty and peers. Still, 20 to 30 percent of students drop out of school because they do not find involvement in the classroom, do not interact with professors and other students, and do not get enough encouragement (Saret, 2007). Tinto (2002) suggests that "any institutional policy to enhance student persistence must address issues of curriculum, pedagogy, and the skills faculty bring to the task of educating students" (p. 6). Noel, Levitz and Saluri, (1985) see faculty as a powerful force to reduce student retention:

> It is the people who come face-to-face with students on a regular basis who provide the positive growth experiences for students that enable them to identify their goals and talents and learn how to put them to use. The caring attitude of college personnel is viewed as the most potent retention force on a campus. (p. 17)

Retention of students is connected with the engagement of students. Kuh, Cruce, and Shoup (2008) give the following definition of engagement, "Student engagement represents both the time and energy students invest in educationally purposeful activities and the effort institutions devote to using effective educational practices" (p.542). One of the benchmarks that frames engagement is student-faculty interaction, which leads to

deeper learning and "becomes part of who the student is, not something the student has" (Zhao & Kuh, 2004, p. 116).

The research by Minifie, Middlebrook, and Otto (2011) shows that it is not only a college or university that wants to increase students' retention but also students themselves that can change their approach to education. Younger generations such as X (featured as highly educated and active), Y (or Millennial, known for their immediate response to the Internet options), and Z (or Post-Millennials, the iGeneration, Founders, Plurals, the Homeland Generation, characterized as multi-taskers and entrepreneurs) use modern technologies to select courses and professors. They consult Internet sites rating professors. The study demonstrates that the preference is given to the professors who use collaborative methods of teaching and involve students into active participation.

One of the programs of the International Organization for Economic Co-operation and Development (OECD) is the Program on Institutional Management in Higher Education (IMHE). The goal of the Program is fostering quality teaching globally, because "higher education can no longer be owned by a community of disciplinary connoisseurs who transmit knowledge to students. Both the complexity and uncertainty of society and the economy will require institutions to continuously adapt while upholding quality standards" (Henard & Roseveare, 2012). Henard and Roseveare (2012) explain:

> …meaning of quality teaching in this context [as] the use of pedagogical techniques to produce learning outcomes for students" (p. 6). "Students as well as employers want to ensure that their education will lead to gainful employment and will equip them with the skills needed to evolve professionally over a lifetime….fostering quality teaching to respond to the growing demand for meaningful and relevant teaching" (p. 8)…."the role of higher education teachers is therefore changing. In addition to being, first and foremost, a subject expert acquainted with ways to transmit knowledge, higher education teachers are now

> required to have effective pedagogical skills for delivering student learning outcomes." (p.9)

Crosling, Heagney and Thomas (2009) assume that "the current interest in student engagement has occurred in a climate where higher education has moved to a huge system with fewer resources so that over decades, there has been concern about the development of student learning in the higher education teaching and learning context" (p. 11). In regards of this, Altbach (1997) asserts that such method of teaching as lecture resulted in loss of communication between students and professors. Bryson and Hand (2007) see shifting from teacher-centered orientation to student-centered orientation as a simple and quick way to engage students. Crosling et al. (2009) state that "the development and utilization of learning and teaching strategies [will] promote a more active, student-centered approach to learning, which draws on students' previous experiences and interests, that helps to enhance student engagement, course commitment and retention on the program" (p. 7).

Statement of the Problem to Be Researched

Given the growing demand for meaningful and relevant teaching in four-year universities, a description is needed of what pedagogies are currently practiced by faculty members and how they consider reshaping those teaching methods.

Purpose and Significance of the Problem

Purpose

The purpose of this grounded theory research was to generate a theory about the relationships between university professors' pedagogies and students' engagement in learning. The research attempted to create the model of teaching in higher educational institutions of the United States of America and gain scientific knowledge of how to

transform the model into technology. This qualitative study examined student-centered teaching practices of university professors. The research explored the pedagogical methods used to effectively integrate knowledge, generate examples and explanations, arrive at creative solutions to problems; it described student responses to pedagogies that bring meaning and relevance to learning; and it collected and systemized resources for professional improvement of higher education instructors.

Significance of the Problem

As stated earlier, some regulatory documents like the Addendum to the Report of the Retention and Advising Task Force (2012-2013) focus on strengthening the relationship between students, departments, and academic advisors but they do not enlighten how faculty are going to solve the problem during actual classroom sessions. Secondly, research demonstrated that retention rates of students is very high after the first year of studies, according to the example of the North Valley University, CA, but it decreases dramatically starting during the sophomore year. It was necessary to study how teachers' preparation affects students' achievement. The National Commission on Higher Education Attainment plans to conduct significant studies in college attainment by 2020. Rhoades (2012) confirms that this plan includes investigating of the influence of faculty on student success and retention (p.3).

The research may become significant and valuable because it intended to add to the understanding of the relationship between professors' student-centered teaching student engagement and outcomes. It revealed pedagogical strategies that positively impact student learning.

Research Questions

This study focused on providing the answers to the following questions:

(1) What teaching methods are the faculty members using to provide meaningful and relevant teaching for students?

(2) How do faculty members describe student responses to pedagogies that bring meaning and relevance to learning?

(3) What professional development resources do faculty believe would facilitate reshaping their pedagogies?

The Conceptual Framework

Researcher Stances and Experiential Base

My interpretive framework presented social constructivism, critical interpretive communities, and grounded theory methodology. By using the social constructivism approach, I sought to develop my own particular meanings that correspond to my teaching experience and generate an actionable theory. Conducting qualitative research based on grounded theory methodology, I intended to play the role of the instrument in the study. Therefore, I constructed data from experience by using my personal theoretical framework that was significant to the goals of conducting my research. My most important belief of mine was that the quality of teaching in the higher educational establishment is tightly connected with quality of students' results. That is why I collected and analyzed data, and later interpreted findings to reach the goal of my research. Another strong belief was that my research would give credibility to my analysis.

Social constructivism as such involves human judgment—in this case, what do professors think about the process? Social constructivism helps to see a university student learning in the process of interaction with other group participants, professors and students. This stance tends to show how people understand experience, thus, forming the communities of understanding. Interviews about teaching/learning process and artifacts showed interaction between participants. It led to transparency of the teaching and learning relationship – how currently practiced pedagogy of university professors affects students' outcome. It also led to discovery of the level of effectiveness. With other stances — critical interpretive community, research methodology, and grounded theory approach – social constructivism led to the opportunity of reshaping teaching methods.

My understanding of social constructivism is close to interpretivism, because I view knowledge and truth as created by the interactions of individuals within a society who are able to structure the way their world is experienced. Max Weber (1864-1920), the founder of interpretivism, assumes that humans have to be studied in social events making their activities meaningful. This was a starting point for the researcher – to understand actions and behavior the way that the participants did. "It is not necessary "to be Caesar to understand Caesar" (Weber, 1978, p. 30). With consciousness that humans have, they actively experience and interpret the world and behave according to this interpretation. According to Rubin and Babbie (2011), "interpretivism values subjectivity" (p. 37). Though objective measurement is important, it does not give an opportunity to know people if their world is not seen through their eyes. Strauss (1987) also emphasizes,

> These experiential data should not be ignored because of the usual canons governing research (which regard personal experience and data as likely to bias

> the research), for these canons lead to the squashing of valuable experiential data. We say, rather, "mine your experience, there is potential gold there!" (p. 11)

The critical interpretive community stance meant for me the opportunity to contribute to the development of higher education in the United States. Like everybody, I want to leave some positive trace for other people. I see my life goal in sharing my acquired knowledge and experience from my generation to the next generation. In addition, I planned to combine my thoughts with ideas of other experienced professionals in the field of teaching in higher educational institutions to produce a viable theory. U.S. policymakers search the resolution of education problems with students' engagement. I find myself helpful in responding to the policymakers' questions by presenting facts and conclusions on the engagement of students in the studies. In cultural terms, the dissertation is directed at using its results by the community of university staff. It is not excluded that professionals working in other fields of higher education will use its findings for the purpose of improvement. Presenting a theory able to assist in everyday teaching might support university leaders and faculty in creating a formula to move forward. I consider my research and dissertation as a communication bridge between the changes that can be made in the university teaching field and perception of them by interpretative communities. My intention is to support the noble reputation of the teacher profession.

Grounded theory research opens for me the opportunity to research multiple realities and investigate the complexities of reality. I estimate my personal experience of the researcher as important because of personal values, the necessity to make decisions, and the formulation of questions. I agree with Evans (2013) who states, "Having

knowledge in a topic does not mean having preconceived ideas" (p. 42). There are several challenges for a researcher to overcome while conducting a study based on the ground theory method. I considered them by stepping aside from personal presumptions and existing theories and by gathering information from additional participants to ensure that the results are true.

Another facet of my framework was critical as I planned to design the study as the one that affects the way educators see the successful teaching/learning process and encourage them to create networks and even make changes in the preparation of teachers. Following Socrates, the assumption was that faculty have critical thinking abilities or need to develop them in the process of listening. Critical research means challenging interpretations and bringing change. Creswell (2013) argues that in the process of change all participants' lives can be transformed for the better. The transformation of students' lives for the better is the goal of education. That is why combination of social constructivism, interpretivism, and critical approach tried to make this study significant for the educational community. The grounded theory as method was found to be appropriate for this research, because the emerging theory was grounded in the views and perspectives of the participants. Grounded theory, similar to social constructivism, places great emphasis on everyday interactions between people.

Conceptual Framework

Though the conceptual framework for this study originates from the notions found in the literature related to how professors share their experience of successful strategies, where they can find resources for their professional development, and how students respond to changes, the research was conducted in the way to allow new data to lead to

emerging categories and create a theory. Grounded theory chosen for this research used the existing literature to "set the stage" (Charmaz, 2006, p. 166).

The study explored how professors work with students and what teaching resources they can use; it also generated comprehensive recommendations for their professional growth and establishment expressed via theory, formulae, and schemes. The research was based on three streams: student-centered methods, student response, and professional development resources. Though each stream was independent and did not compete with others, three of them integrated together presented a solid foundation that resembles Drucker's (1998) idea of stability, balance, and integration in business compared to the visual example of a three-legged stool.

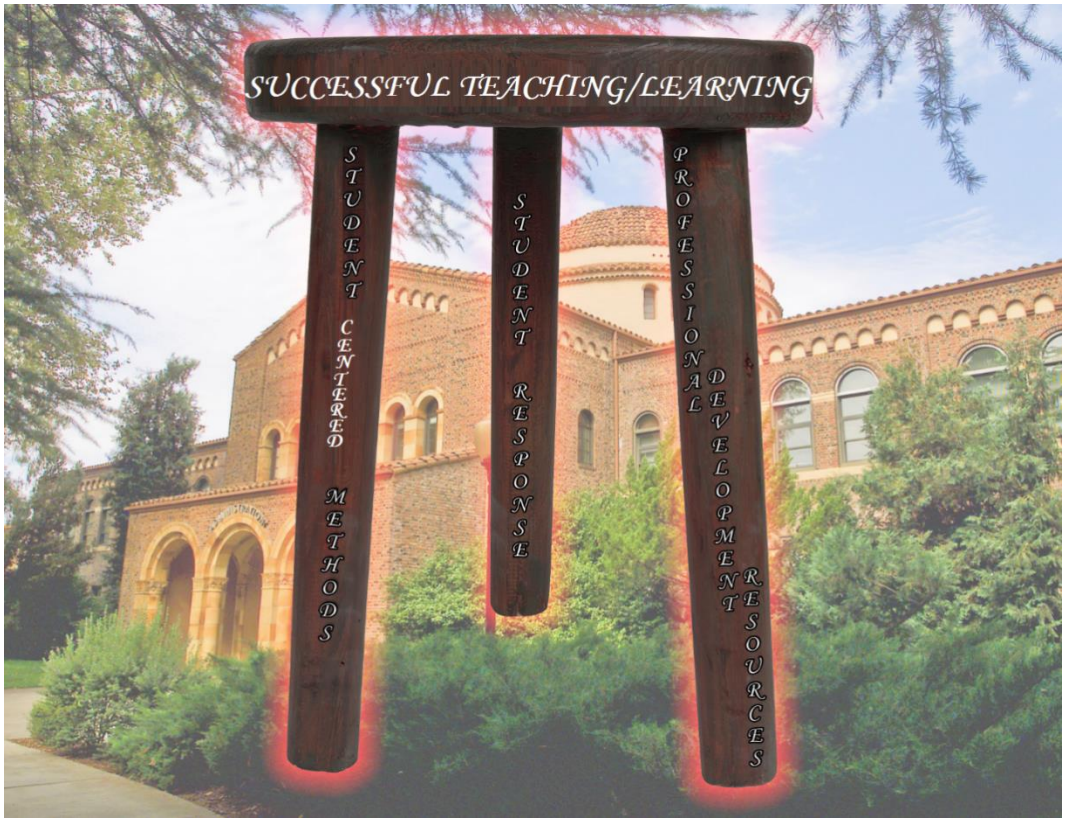

Figure 1. Successful teaching/learning model. This figure illustrates conceptual framework outlining the three research streams. Adapted to Drucker's idea of stability, balance, and integration in business.

The base keeps its stability when built on three sectors: if we learn what methods professors use, we will be able to discover gaps, and recommend resources; if we know what are good resources, we can recommend them for changing and improving teaching methods, tools, and skills; when we find ways to increase quality of teaching, we will see more teaching for student engagement. Imagining that one of these constituents is absent, the surface of the stool – successful teaching/learning – will lose its stability. For example, there are available resources, professors may not know about them or fail to use, other two "legs" – methods and student response – fail to support successful

teaching/learning. The model of teaching seems to be strong and sustainable when it is supported by all three "legs." Three streams (student-centered methods, student response, and professional development resources) provide not only the conceptual framework but also organize the literature review presented more completely in Chapter 2.

Student-Centered Methods. The research starting point was investigating lived experiences of the university professors including their aspirations, their teaching philosophy and the outcome that they receive on a daily basis. This part opened the door for analyzing how methods of teaching affect the students' achievements. The literature review formulated the anticipation of what could be expected in the field. It also showed the many-sided phenomenon of teaching in the higher educational establishment. The researcher considered that understanding difference between traditional and modern teaching, engagement of students as strategy directed at learning success, and university professors' teaching preparedness were major points in this stream to answer the first question of the research - what teaching methods are the faculty members using to provide meaningful and relevant teaching for students?

Literature prepared research to distinguish between traditional and modern teaching methodology in order to understand how teachers' methods might be aligned with students' expectations. Traditional methodology presents a professor who dominated interaction, was the main source of knowledge, and came up with the whole generation of non-communicators. Modern methodology is student-centered, with making a student a receiver, and the outcome is different, subsequently, because the society acquires active participants. This information also attempted to contribute to the field research because there was an opportunity to compare what methods professors use at the designated

facility, what can be new and productive and what can be regarded as not productive though, and possibly, new.

Research confirmed that modern quality teaching leans on intensifying student engagement like the most promising strategy directed at student success and retention. This study looked at one approach to encourage students to engage with their studies - student-centered learning. Crosling et al. (2009) assume that "the current interest in student engagement has occurred in a climate where higher education has moved to a huge system with fewer resources so that over decades, there has been concern about the development of student learning in the higher education teaching and learning context" (p. 11). Crosling et al. (2009) state that "the development and utilization of learning and teaching strategies [will] promote a more active, student-centered approach to learning, which draws on students' previous experiences and interests, that helps to enhance student engagement, course commitment and retention on the program" (p. 7).

Regarding pedagogical approaches to learning, there arose a question how professors are prepared to use their pedagogical expertise, and what their pedagogical education is. Not every professor receives education as teacher to pursue the career and use the received education on teaching methods in the process of teaching. In the sense of scholarship of teaching, teaching does not only educate professionals but also attracts future scholars, and builds a union of teacher's understanding and student's learning. Professional teaching transforms knowledge, engages students, affects developing their critical and creative abilities, and self-educates a teacher at the same time.

Domestic researchers present scarce information about the ways university professors can master their pedagogical expertise. Wankat (1999) stated that most PhD

graduates of the engineering school do not have pedagogical knowledge and skills. The question of professors' teaching education remains in low regards because the higher education community considers that professors can become highly professional pedagogues in the course of their work and without specific training. Wankat (1999) insists that developing teaching skills is possible in the frames of the doctoral program as it supports developing communication skills necessary also in the research activities. Professors have to take either special courses or get training through a series of workshops to become at least "good enough" teachers (Wankat, 1999).

A significant shift happened in the attitude to teaching with instructional effectiveness because it is not so important for students what is taught but how it is taught as knowledge does not transfer automatically from professors to students; there should be a moment of accepting the knowledge and acquiring the skill to operate it. Observing how pedagogies develop further, several authors (Arnold, 2010; Bain, 2004; Kember, 1997) testify that universities are concentrated on teaching effectiveness much more than in the past, and as Kember (1997) states, the concept of "teaching and learning" has been replaced by "learning and teaching" (p. 257) because education becomes more student-centered. Multiple examples show that new methods such as problem-based or inquiry-based lead to student high academic achievements by involving them in collaboration and analysis. Moreover, better results are not only in traditionally sized classrooms but also in the courses that teach one thousand students in one class. The use of innovative technologies plays a leading and powerful role accompanied by the increased student satisfaction.

Student-centered methods literature stream reveals that methods of teaching in the university affect students' learning, involve many aspects of the teaching/learning process, and constantly develop. Literature shows that pedagogies are changing because there is growing demand for meaningful and relevant teaching, and universities have to change teaching approaches, and they are noticeably changing. Literature shows what pedagogies are currently practiced by faculty members and how they consider reshaping those teaching methods. Along with admitting that academic pedagogies influence learning, literature does not show that proper command of the teaching methods is a strong factor. That is why this dissertation has its goal to fill this gap. Finally, literature of this stream provides future research with multiple facts and arguments about the current experience of the faculty members use of teaching methods that provide meaningful and relevant teaching for students. By using literature review and creating the theoretical framework, the researcher was able to establish "ideological sites in which you claim, locate, evaluate, and defend your position" (Charmaz, 2006, p. 163).

Student Response. Investigating how student respond to pedagogies that bring meaning and relevance to learning provided the research with finding ways for the improvement of the quality of the teaching process. Biggs and Tang (2007) state that there are three levels of thinking about teaching as process involving academics as well as students: Level One focuses on a student meaning that students' success depends on the abilities and efforts of students (also called blame-the-student theory of teaching); Level Two focuses on what the teacher does meaning teachers' competency (or blame-the-teacher theory); but only Level Three looks at what a student does when a student is centered, and teaching supports learning. Discussing further three levels of teaching,

Level One does not need much effort from the professor because responsibility to receive a good command of the subject lies on the student who may "lack suitable study skills" (p. 17) or, vice versa, be strongly academically oriented. The teacher is not a participant but only a lecturer.

For Level One teaching, the lecture is the main instrument in the higher education institution. Researchers discuss the notion of an "unmissable" lecture because of the perception of many higher education participants that the lecture should not be missed. In the eyes of students, the unmissable lecture is the one that makes them to be involved and actively participate. Students speak highly about interactive lectures. Exley and Dennick (2004) present evidence that even in big groups of students who are at the lecture, high participation is possible. Speaking about an unmissable lecture, students also express appreciation of the synthesized and most current information, and a possibility to see a big picture. Various points if view of an unmissable lecture do not tie the lecture itself to Level One teaching, which blames students for their failures because the lecture and, specifically, the unmissable lecture is present in both Level Two and Three levels of teaching.

Level Two focuses on teaching technique that may create more interesting and lively discussion of the subject problems. Ramsden (1992) insists that causing interest is an important teaching principle. But interesting discussion does not guarantee that it will bring the student to productive learning. This kind of teaching is teacher-centered and focuses more on the classroom management than on "facilitating learning" (p. 18). At this level, the teacher is competent but it does not make him effective because

involvement of his students in the process does not necessarily lead to new knowledge and skills.

Biggs and Tang (2007) confirm that only Level Three thinking about teaching looks at what a student does when a student is centered, and teaching supports learning:

> Teachers at Level 3 focus on what the student does and how that relates to teaching. Level 3 is a student-centred model of teaching, with teaching supporting learning. No longer is it possible to say: 'I taught them, but they didn't learn.' Expert teaching includes mastery over a variety of teaching techniques, but unless learning takes place, they are irrelevant; the focus is on what the student does and on how well the intended outcomes are achieved. (p.19)

Within Level Three, mastery of teaching reaches the possibility to produce the expected student outcome when students become experts of the subject and acquire the necessary skills. Students start to understand that their meaningful and appropriate engagement leads to their academic and future job success. Biggs and Tang (2007) argue that the climate created by the professor significantly influences student success. In many cases, students state that they feel anxiety when the professor mistrusts them or threatens with sanctions; they stop thinking about the engagement and focus only on the outcome that can be received by all means. A reflective professor would learn from student responses and change some practice, which will show professional growth and improve learning. But if the professor is reactive, it will keep him/her at Level One, or blame-the-student approach, and become an obstacle to successful learning.

This literature review investigated responses from diversified groups of students because student responses express student expectations. In the 21st century students have varied experiences and they expect universities to be able to develop multiple skills needed in their work and career. Literature shows that students expect high quality and immediate support services, easily available technology and better infrastructure. The

review presents some evidence that today's students expect more from the quality of teaching. (Thien & Bulleri, 1996) state that students are motivated if their goals are related to the future careers. But there is no clear distinction what methods of teaching bring students the biggest satisfaction. On the other side, literature proves that collaboration and student engagement create a dialogue that can lead to improvement. The best cases demonstrate that teaching, learning, and evaluation should be meaningful if they are suggested to be useful.

Professional Development Resources. The research concentrated on the professors' behavior in cases when they need pedagogical assistance. The authors who contributed to this literature review came to the consensus that engagement of students in the teaching/learning process results in high academic achievements and retention of students in the universities. There was a question what resources would help faculty to engage students successfully. Handelsman et al (2004) assume that universities can promote change in teaching approaches by implementing modern teaching methods using multiple resources:

> development of peer-reviewed instructional materials, …providing venues for experienced instructors to share best practices and effective teaching strategies, …forming educational research groups, …incorporating sessions about teaching into seminar series, developing parallel series about teaching, or establishing instructional material" incubators" where researchers incorporate research results into teaching materials with guidance from experts in pedagogy, organizing education workshops and meetings. (p. 522)

Universities and professional societies need to create more vehicles for educating faculty in effective teaching methods. Rhoades (2012) notices that despite emerging teaching centers in some universities there is a significant lack of resources (p. 15) because concentration of teaching is on general instruction. In their turn, professors "do

NOT seek help from teaching centers" (p. 15) because the staff have little experience and express inability to work with professors individually.

Discussing available resources, it is worth noting that literature is scarce like an example of such powerful resource as mentoring and supervision that will be described in more detail in the second chapter. Professional learning continuum is one of the ways to become perfect in the teaching profession. Fullan (1998) states, "The teaching profession itself will have to undergo total transformation in order for substantial progress to be made." The institutions will build programs for professional learning depending on partnership of institutions and using leader teachers for growing positive experience.

The existing literature confirmed that the question about faculty resources to engage students successfully needs professional answer. It became evident that the universities should become creators of programs for educating faculty in effective teaching methods. In comparison with scarce availability of resources in the 20th century, the question of resources started to get answers. The literature enriches this stream with the knowledge about existing resources for the faculty, reveals gaps via insufficient researches and underperformed analysis of findings, and ways of implementation in the practice of teaching.

Before the study began, there was a strong belief of the researcher that understanding student expectations along with the appropriate selection of teaching methods combined with the described resources for professional development of the university professors make the model of teaching represented as a three-legged stool stable and consistent.

All three streams were interrelated by the topic of the study – influence of teaching on students' achievement in the area of undergraduate higher educational school. They were focused on identification of obstacles that cause low retention of undergraduate students in the university. They looked for assisting resources to make the teaching/learning process successful. They also revealed where the gaps were and how to fill them. They showed examples of how to improve the process of education. All the streams prepared the researcher to the field investigation. Literature pieces were directed to answer research problems.

The first stream investigated what teaching methods are used currently. The review showed that higher educational establishments nowadays look more precisely than in the past at how the subjects are taught. Teachers have to transform their skills and abilities to go along with time—to be prepared spiritually, to be technically knowledgeable, and to be ready to work with the new generation of undergraduate students. The second stream revealed that today's students present a new phenomenon in the history of higher education. Student responses demonstrated that though schools perform a lot of changes it is not enough to meet the requirements of the current changes in school life. Students' vision of teaching connects the principles of universities and the real world. The third stream demonstrated that it is challengeable for professors to find effective pedagogical resources. This stream also identified some new resources that can become very useful for successful teaching/learning process. The third stream showed that there is a strong potential supported by the university leaders and faculty. In conclusion, working with literature demonstrated that the research is needed in order to make the educational system of the United States more organized and perfect.

Definition of Terms

The following is a list of key concepts utilized in this study that warrant clarification and common definition:

Constructivist learning

> Constructivist conceptions of learning…assume that knowledge is individually constructed and socially coconstructed by learners based on their interpretations of experiences in the world. Since knowledge cannot be transmitted, instruction should consist of experiences that facilitate knowledge construction. (Jonassen, 1998, in Reigeluth, 1999, p.217)

Interpretivism

> A research paradigm that focuses on gaining an empathic understanding of how people feel inside, seeking to interpret individual's everyday experiences, their deeper meanings and feelings, and the idiosyncratic reasons for their behaviors. Rubin & Babbie, 2011)

Learner-centered teaching

> Student-centered instruction (SCI) is an instructional approach in which students influence the content, activities, materials, and pace of learning. This learning model places the student (learner) in the center of the learning process. The instructor provides students with opportunities to learn independently and from one another and coaches them in the skills they need to do so effectively. The SCI approach includes such techniques as substituting active learning experiences for lectures, assigning open-ended problems and problems requiring critical or creative thinking that cannot be solved by following text examples, involving

students in simulations and role plays, and using self-paced and/or cooperative (team-based) learning. Properly implemented SCI can lead to increased motivation to learn, greater retention of knowledge, deeper understanding, and more positive attitudes towards the subject being taught (Collins & O'Brien, 2003, p.446).

Learning

Both the process and the result of questioning and interpreting, the application of thought processes and information to build and improve our understandings, and the integration of current experiences with past experiences. (Marlowe & Page, 1998, p.7).

Meaningful and relevant education

Developing skills to solve organizational problems, equipping with skills needed to evolve professionally over a lifetime, and leading to gainful employment. (Henard & Roseveare, 2012).

Quality teaching

The use of pedagogical techniques to produce learning outcomes for students. It involves several dimensions, including the effective design of curriculum and course content, a variety of learning contexts (including guided independent study, project-based learning, collaborative learning, experimentation, etc.), soliciting and using feedback, and effective assessment of learning outcomes. It also involves well-adapted learning environments and student support services. (Henard & Roseveare, 2012).

Scholarship of teaching

The scholarship of teaching shares characteristics of excellent and scholarly teaching, but in addition involves communicating and disseminating about the teaching and learning practices of one's subject and also entails researching into how students learn within a discipline. (Hutchings & Schulman, 1999).

Student engagement

Both the time and energy students invest in educationally purposeful activities and the effort institutions devote to using effective educational practices. (Kuh et al., 2008).

Assumptions and Limitations

The following assumptions guided this study. The first belief was that quality of teaching in higher educational institutions is a factor influencing student retention and graduation rates. Second, society, community, and university consider improvement of student retention as the main educational goal. Third, data collection and analysis would be based on careful assessment of the research results but not on the hidden intentions of the researcher to receive the desired conclusion.

The paper was not able to research all reasons that cause retention improvement or decline but looked at the connection between the quality of teaching and student achievements. The first limitation was that the study was not able to include all possible subjects, thus making the recommendations biased to certain extent. Another limitation was that students' retention and graduation rates are influenced by many other factors except faculty-student collaboration, thus lessening academic impact on an individual

student. The third limitation was that the research was conducted in one university that may lead to inability of applying the emerged theory for other higher educational schools.

The fourth limitation was that the research did not include teaching first-year students because there is enough literature to confirm that most universities created programs for them resulted in increase of retention results. National Survey of Student Engagement (NSSE, 2006) states that higher education schools initiate programs directed at freshman success with emphases on recruitment, retention, and improvements to the undergraduate advising process, "Student engagement is positively related to first-year and senior student grades and to persistence between the first and second year of college at the same institution" (p. 24). The North Valley University, where the researcher conducted a study, is cited in the NSSE report achieving its goal of the first-year student success by implementing the Freshman-Year Experience Initiative and achieving 89 % retention. That is why the researcher saw more sense in investigating the problem of retention of sophomores and seniors.

Summary

The qualitative grounded theory research selected for this study concentrated on investigation of how student-centered methods of university professors contribute to student outcomes, on the available resources for professional development of teachers, and identification of a theory that describes how to apply teaching methods to increase beneficial educational outcomes for students. It is hoped that findings of this research will contribute to creating successful retention programs.

Chapter 2: The Literature Review

Introduction to Chapter 2

University student retention is considered low globally and in the United States. This problem needs close study to identify the reasons and show the way of improvement. The existing research finds out that students leave higher education for financial and personal circumstances. The International Organization for Economic Co-operation and Development (OECD) presents data from multiple institutions demonstrating lack in meaningful and relevant teaching, which is a strong factor affecting student retention. According to the OECD, students and their future employers hope that universities will teach students practical professional skills. The Program on Institutional Management in Higher Education (IMHE), a permanent forum of OECD, where educators can exchange ideas and address issues, provides many instructions on how to align teaching to the demands of the society,

> Higher education can no longer be owned by a community of disciplinary connoisseurs who transmit knowledge to students. Both the complexity and uncertainty of society and the economy will require institutions to continuously adapt while upholding quality standards. As a proactive measure, many institutions have implemented specific teaching and learning strategies and have designed mechanisms and instruments to improve the quality of education. (Henard & Roseveare, 2012, p. 9)

Drucker (1992) discussed and clarified many ideas on teaching, one of which is understanding that "mass education" must be "quality education" (p. 362). IMHE explains in more detail "the meaning of quality teaching as the use of pedagogical techniques to produce learning outcomes for students" (Henard & Roseveare, 2012, p. 6). The Program insists that several constituents when comprised lead to more successful teaching and, in its turn, to more successful learning.

According to Henard and Roseveare, 2012, "the role of higher education teachers is therefore changing. In addition to being, first and foremost, a subject expert acquainted with ways to transmit knowledge, higher education teachers are now required to have effective pedagogical skills for delivering student learning outcomes" (p.9). They also need to co-operate with students, colleagues from other departments, and also with external stakeholders.

> IMHE came to the conclusion that fostering quality teaching is a multi-level endeavor. Support for quality teaching takes place at three inter-dependent levels: at the institution-wide level (including projects such as policy design, and support to organization and internal quality assurance systems), program level (comprising actions to measure and enhance the design, content and delivery of the programs within a department or a school), and individual level (including initiatives that help teachers achieve their mission, encouraging them to innovate and to support improvements to student learning and adopt a learner-oriented focus). (p.7)

Basing on their research, Steinert, Cruess, Cruess and Snell (2005) concluded that "faculty development activities should move beyond instructional improvement and target 3 levels: the individual, the program and the system" (p. 135).

This study focused on the ways university professors may achieve quality professional skills that meet the requirements of satisfying students' expectations and influence baccalaureate student retention. So the concentration was on the individual level of fostering quality teaching.

Literature Review

The conceptual framework for this study originates from the notions found in the literature related to what teaching practice in the higher education facility consists of nowadays, how professors can share their experience of successful strategies, where they can find resources for their professional development, and most importantly, how

students respond to their teaching in the sense of academic results, satisfaction, and retention in the university. Conceptual framework consists of social constructivism and critical interpretive communities. The researcher developed her own particular meanings that correspond to experience and generate an actionable theory. She intended to develop sense and implication of meaningful and relevant teaching in coordination with other professors, students, and community on the whole. Social constructivist approach helped answer the question what professors think about the process, and see a university student learning in the process of interaction with other group participants, professors and other students. This stance tended to show how people understand experience thus forming the communities of understanding. Within observation of teaching/learning process, interviews and artifacts served interaction between participants. It led to transparency of the teaching and learning relationship—how currently practiced pedagogy of university professors affects students' outcome; it also led to discovery of the level of effectiveness; and with other stances—critical interpretive community, research methodology, and grounded theory approach—social constructivism led to the opportunity of reshaping teaching methods. Social constructivism also leaned on interpretivism as the way to observe interactions of individuals within a society who become able to structure the way their world is experienced. This is where interpretivist value of subjectivity begins to play a significant role giving an opportunity to know people. Another side of the framework was critical to encourage educators to make changes in the preparation of teachers. The expectation is that combination of social constructivism, interpretivism, and critical approach will make this study significant for the educational community. Selection of the grounded theory method for this research was felt as appropriate because the emerged

theory was grounded on the views and perspectives of the participants. It explored how professors work with students and what teaching resources they can use; it also generated comprehensive recommendations for their professional growth and establishment expressed via theory and scheme. The research was based on three streams: student-centered methods, student response, and professional development resources.

Conceptual Framework of the Three Research Streams

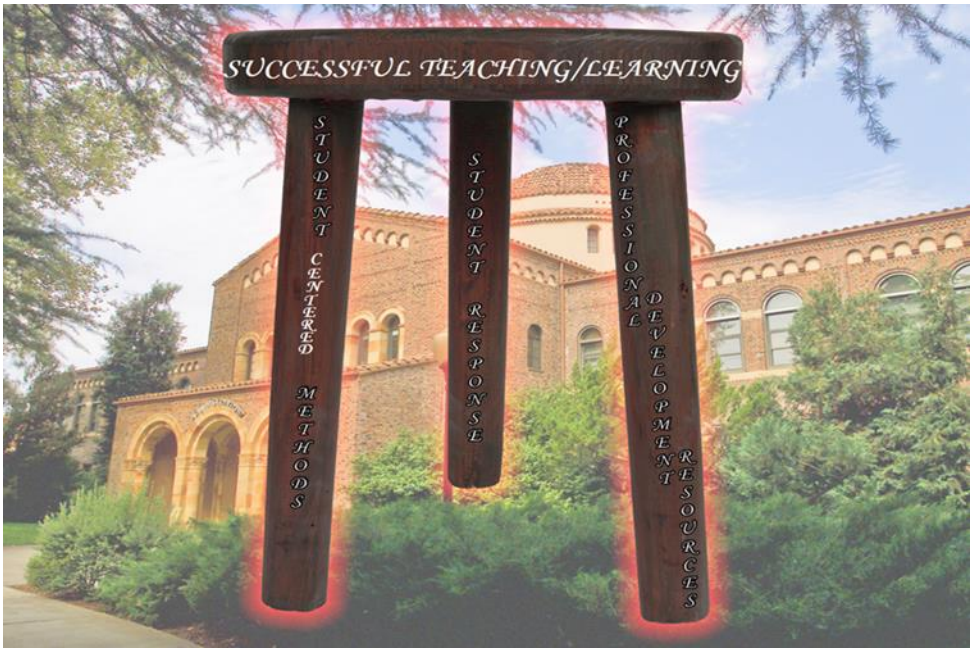

Figure 1. Successful teaching/learning model. This figure illustrates conceptual framework outlining the three research streams. Adapted to Drucker's idea of stability, balance, and integration in business.

Student-Centered Methods

This study looked at one approach to encourage students to engage with their studies—student-centered active learning designed to involve students in the learning process. Crosling et al. (2009) assume that

> the current interest in student engagement has occurred in a climate where higher education has moved to a huge system with fewer resources so that over decades, there has been concern about the development of student learning in the higher education teaching and learning context. (p. 11)

In regards of this, Altbach (1997) asserts that such method of teaching as lecture resulted in loss of communication between students and professors. Bryson and Hand (2007) see shifting from teacher-centered orientation to student-centered orientation as a simple and quick way to engage students. Crosling et al (2009) state that "the development and utilization of learning and teaching strategies [will] promote a more active, student-centered approach to learning, which draws on students' previous experiences and interests, that helps to enhance student engagement, course commitment and retention on the program" (p. 7).

Altbach (1997) asserts that these factors have contributed to increased movement towards the lecture method of teaching from the early part of the last century in America, which has led to less interaction between students and teachers. Kuh (2003) states that the data on student engagement are so scarce that one cannot "make judgments" if the relationship of engagement and success is established (p.32).

Bauer (2008) and the team were investigating the goals of teaching and the place of student engagement in the teaching/learning process while teaching literature. They aimed at finding border where teaching goals and student needs could overlap. They came to the conclusion that the biggest difficulty experienced by professors was the way

they "view and relate to students" (p. 181). In cases when professors were helpful to students in becoming successful in the academic life and preparation for the career, they engaged students in everyday classes by creative interactive groups where leading role of the instructor transformed to the leading role of the students. Bauer admits that it was not an easy cooperation but productive:

> However, it seems that often this model of communicative dialogue comes to stand in for or imply many of the others: empowerment, expression, inclusiveness, participation, and student-centeredness are just a few of its related buzzwords. In such fantasies, the classroom becomes a site in which power relations dissolve in feel-good sharing or get subverted, either by having students take on power over the course or by questioning dominant values. No one gets excluded, everyone feels good, and a blow is struck for social justice.

Regarding pedagogical approaches to learning, there arose a question how professors are prepared to use their pedagogical expertise. The suggestion might be that a professor receives education as teacher to pursue the career and use the received education on teaching methods in the process of teaching. Domestic researchers present scarce information about the ways university professors can master their pedagogical expertise. Graffam (2007) writes that medical educators do not receive pedagogical training. Wankat (1999) stated that most PhD graduates of the engineering school do not have pedagogical knowledge and skills. The question of professors' teaching education remains in low regards because the higher education community considers that professors can become highly professional pedagogues in the course of their work and without specific training. Wankat (1999) insists that developing teaching skills is possible in the frames of the doctoral program as it supports developing communication skills necessary also in the research activities. Professors have to take either special courses or get training through a series of workshops to become at least "good enough" teachers

(Wankat, 1999). Brazeau and Roche (1998) question, "Are we ensuring that we're staying current in the educational methods, techniques and strategies necessary to provide students with creative thinking and problem-solving skills required for success in an uncertain environment? Are we practicing what we're preaching?" They state that there are programs where faculty can get on-site training how to better and more efficiently involve students into learning, and become "competent, creative and innovative teachers."

International research on training of university teachers is not rich either. According to Postareff, Lindblom-Ylanne and Nevgi, (2007), "The lack of research in this field is noticeable, leading to a lack of adequate evidence of the impact of training on teaching" (p. 557). They refer to Gilbert and Gibbs (1999) who instructed to investigate how effectively training of university professors affects teaching itself. Gibbs and Cofey (2004) gathered data on higher teacher education in different countries. Only several countries such as Norway, England and Sri Lanka created mandatory teaching programs for the university teachers. Other countries still follow traditional way of assigning professors without pedagogical education.

Many scholars and policy-makers propagate that teacher education requirements oftentimes serve as a barrier to starting teaching. Boyer (1990) finds many scholars with the opinion that teaching is such a routine function that "almost anyone can do" (p. 23). Multiple examples show that teachers express resistance to incorporate teaching knowledge into classroom sessions as McCaughtry (2004) concludes after studying pedagogical competence of physical education teachers in the undergraduate environment. The author explains such attitude by skepticism that utilizing teaching

methods, teachers suggest it hinder with presenting skills and knowledge. Boyer (1990) fights this point of view saying that teaching becomes teaching when other people can understand knowledge. The author supports this opinion by Aristotle's quote, "Teaching is the highest form of understanding" (p. 23). In the sense of scholarship of teaching, teaching does not only educate professionals but also attracts future scholars, and builds a strong union of teacher's understanding and student's learning. Professional teaching transforms knowledge, engages students, affects developing their critical and creative abilities, and self-educates a teacher at the same time.

Teaching in the higher educational institution without special pedagogical preparedness was not such a new point of view because still in 1968, Drucker advanced the idea that teacher-training institutes are not able to prepare good teachers because teaching belongs to "naturals" who are born to teach, "Teaching is the only major occupation of man for which we have not yet developed tools that make an average person capable of competence and performance" (Drucker, 1992, p. 316). The author dismissed his skepticism later by predicting that relationship between teaching and learning will change, and teachers will learn how to teach. Madhavaram and Laverie (2010) call competence in pedagogy "sine qua non" that means "a thing that is absolutely necessary." But according to these authors, "learning to teach" is absent in the list of the doctoral programs (p. 198). They offer a step-by-step program of educating future and new professors but it sounds like a separate program, which is not routine in the U.S. academe world. They insist that "inadequate pedagogical training" (p. 199) still exists despite a long history of noting that professors receive stronger preparation in how to conduct the research than in how to teach students, which takes most of their academic

time. From Bossard and Dewhurst (1931) to Golde and Dore (2001), who stressed the fact that doctoral students are not ready to serve as faculty because they lack knowledge in teaching methods, almost nothing changed. Madhavaram and Laverie (2010) suggest student management capability necessary to bring students to the desirable outcome. Their program is supposed to make professors more confident and successful with students. Pedagogical training, or education, develops teacher's ability to see beyond the own perspective, to put himself/herself in the shoes of the learner and to understand the meaning of that experience in terms of learning.

University professors in the United States (U.S.) assume that they can teach what they know to other people. The question of academic competence is clearly answered in the study of the European researchers who define the academic competence as "Competence (in terms of professional competence) can be defined as a summary of the key professional and personal skills/talents and behavioural patterns that an individual needs to have and demonstrate in order to successfully accomplish the defined professional goals and perform the relating professional tasks, duties and responsibilities (Blašková, 2011, p. 108). Blašková, Blaško, and Kucharčíková (2014) developed a competence model of university teachers stating, "Such competence model should become a quality standard or a paragon of the positive indicators of the teacher's working behavior" (p.1). Their academic competences model represents a system of competences of the key professional skills, personal talents, and behavioral patterns of a university professor: professional, educational, motivational, communicational, personal, science and research, and publication competences.

Fang (1996) notes that there is a belief that a good professor is the one who perfectly knows the material. In such a case, according to Biggs and Tang (2007), a professor would assume that if a student is not able to learn the subject, he/she "isn't fit to be at university" (p. 23), which creates undue anxiety or low expectations of success that, in its turn, leads to a student's drop out of school, and consequently, decreasing retention. Basing teaching only on lecturing and assessment, many professors will receive some results, both positive and negative, but always surface because though they cover the subject contents their students will not be able to apply their knowledge in the future even if at this moment they get a passing grade. Simultaneously, students resent professors who cannot understand that students may be different from themselves. Teacher education mission is to grow professionals' wisdom about the many ways in which learning and teaching interact.

Another dilemma is, according to Drucker (1992), that there are many academics who consider research, traditionally, main occupation of university scholars, incompatible with teaching and needs of students (p. 363). Drucker opposes this point of view by saying that both products, of research and teaching, should serve the opportunity for students to apply the received knowledge. Continuing the argument, Frank (2002) asks if Albert Einstein was a good teacher while in Princeton in the sense that "good" means good service to the student community. Einstein's former students describe him, on the one hand, as a great lecturer who wanted to be useful and had an artistic talent to communicate with other people. "The charm of his lectures was due to his unusual naturalness, the avoidance of every rhetorical effect and of all exaggeration, formality, and affectation" (p. 90). On the other hand, Einstein did not like regular lectures. He was

lecturing on the topics that were interesting for him at the moment. Frank (2002) calls this as "uneven" lecturing (p. 91). Bauer et al. (2008) argued that students can feel bored and apathetic if a professor does not find a proper way to present the material to them. The authors came to the conclusion that pedagogical development looks "pale" (p. 180) with scholarly development, and many professors do not have or find it difficult to formulate their teaching philosophy.

The dilemma becomes even more complicated when university professors, in many cases, do not consider themselves as teachers but as lecturers on their academic disciplines (Buijs, 2005, p. 331, and Kember, 1997, p. 255). Such point of view separates them from pedagogy because it is not so important for students what is taught but how it is taught as knowledge does not transfer automatically from professors to students; there should be a moment of accepting the knowledge and acquiring the skill to operate it. The audience expects good, or effective, teaching on the part of the instructor. According to Buijs (2005), it is "a certain level of pedagogical expertise" (p. 333). Biggs and Tang (2007) state that there are three levels of thinking about teaching: Level One focuses on a student meaning that students' success depends on the abilities and efforts of students (also called blame-the-student theory of teaching); Level Two focuses on what the teacher does meaning teachers' competency (or blame-the-teacher theory); but only Level Three looks at what a student does when a student is centered, and teaching supports learning. Ramsden (1992) calls pedagogical expertise "a body of didactic knowledge" that is, in other words, "the professional authority of the academic-as-teacher" (p. 9). Shulman (1986, 1987) added to the pedagogical science by introducing the term "pedagogical content knowledge" that "refers to the ability to represent important ideas in

the way that makes them understandable to students." Returning back to the findings of Gibbs and Cofey (2004), Postareff et al. (2007), it is important to note that classes of young professors become student-centered after 4-18 months of training. Postareff et al. 2007) go further by confirming that training serves not only the goal of improving teaching but it changes "the teachers' beliefs about themselves as teachers" (p. 569). Search for the studies focused on the pedagogical education or training of university professors brings to the conclusion that universities do not pay sufficient attention to this matter. Though international studies are scarce, U.S. research studies are even less.

Observing how pedagogies develop further, several authors (Arnold, 2010; Bain, 2004; Kember, 1997) testify that universities are more concentrated on teaching quality than before. Kember (1997) comes to the conclusion that the concept of "teaching and learning" sounds differently – it is rather "learning and teaching" because education becomes more student-centered. Martin, Prosser, Trigwell, Ramsden, and Benjamin, (2000) argue, "where teachers see the focus being on student learning (as opposed to being on teaching) and where teachers work to help students develop or change their own understanding of relevant ideas and conceptions, then students will learn more effectively" (p. 389). Arnold (2010) concludes, "Teaching and the student experience are interlocked" (p. 2).

Students' expectations of becoming active participants in the society cause transition from traditional to modern teaching methods. Boumova (2008) observes that traditional methodology presents a professor who dominates interaction, is the main source of knowledge, and comes up with the whole generation of non-communicators while modern methodology is student-centered, with making a student a receiver, and

transforming him into an active participant. Scrivener (2005) sees the traditional methodology similarly, "being in a class in the presence of a teacher and 'listening attentively' is [...] enough to ensure that learning will take place" (p. 17). Learning happens when the professor enables students "to work at their own speed, by not giving long explanations, by encouraging them to participate, talk, interact, do things, etc." (pp. 18-19). Biggs and Tang (2007) state that traditional teaching ignores alignment, that is professors assess students not on the criterion basis (how individuals' learning meets the intended outcomes) but on the comparison basis (how students are norm-referenced between each other).

According to Handelsman et al. (2004), transition from traditional to modern teaching is not an easy process though the report of 1989 "Science for All Americans" by the AAAS (American Association for the Advancement of Science) was supported by many stakeholders of higher education who assume that the teaching reform in higher education "should be founded on "scientific teaching," in which teaching is approached with the same rigor as science at its best" (p. 521). The authors (2004) insist that the main constituent of "scientific teaching" is engagement of students in the process of studies and applying various teaching methods to reach the diverse student body (p. 521). They observe professors that are very successful by using the traditional lecture method, and they observe professors who are very cautious and intimidated to change their teaching as it does not give successful outcome. There is evidence that a significant group of the university professors replace lectures with active learning strategies and engaging students in discovery. At the same time, they watch that learning results improve and knowledge retention stabilizes. The authors present multiple examples showing that new

methods such as problem-based or inquiry-based lead to student high academic achievements by involving them in collaboration and analysis. Moreover, better results are not only in traditionally sized classrooms but also in the courses that teach one thousand students in one class. The use of innovative technologies plays a leading and powerful role accompanied by the increased student satisfaction and higher retention.

Engagement of students becomes a cornerstone of the argument whether traditional or modern methods are more effective. Betts and Gladney (2010), Drexel professors and members of the National Academic Advising Association (NACADA), followed the online Master of Science in Higher Education (MSHE) Program based on the approach of active student engagement and personalized educational experience. Created in 2005, the program increased enrollment for twenty-six to two hundred students for four years, with retention rate of eighty-three per cent. The students confirmed the importance of engagement in their retention in the survey. The research performed by Balan and Metcalfe from Australia (2011) showed that student results were better with engagement methods, and also those methods were supported enthusiastically by students. They based their study on the criteria of engagement, which multiple studies use to validate engagement. These criteria are forty-two; they are called items, for example, "analyzing basic elements" (Item 1), "applying theories and concepts" (Item 2), "spending time on study" (Item 3), "making judgments about value of information" (Item 4), "synthesizing and organizing ideas" (Item 5), requiring students to prepare for tests by "reading assigned textbooks" (Item 6) and "preparing for class" (Item 9).

The research was conducted for the entrepreneurship course to find out what "a structured and systematic way for selecting, evaluating and developing specific teaching

methods" (p. 382) may be. They found out that such teaching strategies as involving students in "poster plan" and "team-based learning" are the most winning ones. Creating a poster plan is aligned with Michaelsen and Sweet's (2008) proposition that group learning is enhanced when students report simultaneously on their work in such a way that all students in a class see the work that others submit. Team-based learning belongs to the type of collaborative learning. A team of students prepares some topic before the class. During the class they can present the topic, take a test, interact with the whole class and provide feedback. This method includes a process for students to provide constructive feedback on team contribution to other team members (Michaelsen and Sweet, 2008). The authors offer to continue the research based on other higher education courses because, after result analysis, their strong belief is that not only future entrepreneurs but other 21st century professionals need active participation.

Deeper literature overview of modern teaching methods includes the following ones as more frequently used in higher education:

Guided discovery. Scrivener (2005) also introduces a radically new teaching method of "guided discovery" as the one that is "leading people to discover things that they didn't know they knew" (p. 268). The argument is that this method existed under the name of inductive method and promulgated by Van Doren as "the art of teaching" because it assists discovery. Discovery comes through fostered students' ability to think independently, assess information and analyze reasoning. It is based on constructivist learning theory that defines learning as both the process and the result of questioning and interpreting, the application of thought processes and information to build and improve

our understandings, and the integration of current experiences with past experiences (Marlowe & Page, 1998).

Test-Teach-Test. Another effective and successful method of teaching is test-teach-test, in which the students test themselves, or in other words discover what they already know, revise or learn something new (Zemenova, 2006-7).

Authentic learning. Multiple researchers state that engagement of students is more productive if they are engaged in "authentic" learning, in other words, when they participate in close to real life projects and can apply their subject matter knowledge. They become able to solve complicated problems, consider alternatives, analyze, and communicate effectively to audiences. Lombardi (2007) stresses significance of authentic learning for situations when "a more complex set of competencies are required" (p.10). New competences such as being able to find an original solution of the problem are those that employers require presently. That is why it is helpful if professors help students develop skills of higher level when students can find approaches for the situations with no distinct answer. But in many cases, students do not have opportunities to be engaged thoughtfully with professional problems because professors continue to use expository methods as Bok's study of 2006 (Biggs & Tang, 2007, p. 72) shows. In the University of Texas, teachers spent 88% of their teaching time in lecturing students leaving it to the students to find ways of solving problems when they graduate and start to work.

Cooperative learning. Students also learn more deeply when they do projects that require sustained engagement and collaboration. This is method of cooperative learning when small teams use a variety of learning activities to improve their

understanding of a subject. Students are taught by design-based instruction, project-based learning, and problem-based learning.

Design-based instruction. Students are instructed to create, assess, and redesign products through stages of revisions. The work often requires collaboration and specific roles for individual students, enabling them to become experts in a particular area.

Project-based learning. Students explore real-world problems and challenges, developing cross-curriculum skills while working in small collaborative groups.

Problem-based learning. Students get better knowledge and skills if they are taught not only what to learn but also how to learn. Students learn through the process of solving a problem. This method narrows the gap between students' levels engagement in learning. The goal is to create such teaching environment that every student will be able to solve professional problems (Biggs & Tang, 2007, p. 10).

Inquiry-based learning. Students are active in creating the problem. They are placed in the center, their questioning is emphasized, they are taught to be critical and solve real life problems.

These multiple new methods step into patterns of constructivism. "Constructivism can be described as a view of learning suggesting that learners create their own knowledge of the topics they study rather than having that knowledge transmitted to them by some other source" (Eggen & Kauchak, 2007, p. 235). Constructivism serves interruption for the massive Millennial generation (1982 – 2002) attack. Oblinger (2003) writes, "A new group is entering higher education – a group called "Millennial generation. …Millennials gravitate toward group activity; …believe "it's cool to be smart"; are fascinated by new technologies" (p. 2). Recently a new generation called Z

joined a diverse team of students. This generation is even more advanced than Millennials because they are able to operate more technologies, for which they are also called the Internet generation. They consider search of new information a simple action where they do not need an instructor. Seemiller and Grace (2015) state, "Educators now are spending more time teaching students how to determine what is credible for academia as research shifts from peer-reviewed journals and books in a library to blogs and op-eds" (p. 122). The same authors cite one of their Z generation student, "My ideal learning environment is one where I can participate with the group only if I choose. I like to be mentally engaged, but learn best by myself, and would prefer that collaboration were an option" (p. 125). What differentiates Z students from the previous generations is their goal for receiving higher education that is explained by the recession epoch when they grew and observed high rate of unemployment. According to Seemiller and Grace (2015), Z students demand transparency from Academia:

> Generation Z students are realistic problem solvers who appreciate honesty and authenticity from those who lead them. They do not like to be protected from problems or to have them sugar-coated. They would rather face an issue head-on and be part of the solution." (p. 133)

Carter (2008) promulgates that "a constructivist environment should place learners in an active role in the learning process" (p. 28). Thus a student becomes centered. Yager (1997) clarifies that "teachers' actions include: a) organizing activities for students to gain experiences that will lead to learning, b) asking questions of students to guide them in learning from activities, and c) using alternative forms of assessment to appraise students' learning" (p. 9).

Biggs and Tang (2007) advise that professors should start with designing, delivering, and reviewing their curricula because curricula will develop into what is

called “lecture theater”, classroom, evaluation, and assessment. Tutorials that may be face-to-face or virtual are of not less importance. For undergraduate students, interaction with knowledge is expressed through such a powerful mover as assessment. It has to be natural resulting from classroom materials, learning process, and communication between the instructor and students and students with students.

The 21st century being the Information Age brings students with new cultural background who got used to having information immediately. Kavadella, Tsiklakis, Vougiouklakis and Lionarakis (2012) looked at the results of the dental students taught by conventional face-to-face method and new blended method that included face-to-face and online learning. The achievements of the students taught by the blended method appeared much higher than those that were learning face-to-face.

Despite tremendous influence and changes that the age of technological singularity is going to bring to civilization, many theoreticians keep thinking that education process will always involve interaction of a teacher and a student. Their communication may be not only in the classroom. Rudolf (1962) came to the conclusion that faculty-student interaction existed in the US system always. The classical and well-known example of this philosophy was presented by Rudolf (1962) who had taken it from the biography of then a student, and later future President, James A. Garfield who expressed the dream of an ideal college, "The ideal college is Mark Hopkins on one end of a log and a student on the other." To check how this philosophy works nowadays, Cox, Mclntosh, Terenzini, Reason, and Lutovsky Quaye, (2010) performed the research, in which forty-five campuses took part. Together with other researchers, they witness positive student outcomes linked with faculty-student interaction but the surprising part is

that faculty-student interaction outside the classroom became less frequent for the past fifty years. They did not investigate the reasons that may be a gap in the literature along with the study whether this teaching method is effective in the 21st century.

Student-centered stream reveals that methods of teaching in the university affect students' learning, involve many aspects of the teaching/learning process, and constantly develop. Literature shows that pedagogies are changing because there is growing demand for meaningful and relevant teaching, and universities have to change teaching approaches, and they are noticeably changing. Literature shows what pedagogies are currently practiced by faculty members and how they consider reshaping those teaching methods. Along with admitting that academic pedagogies influence retention of students, literature does not show that proper command of the teaching methods is a strong factor. That is why this dissertation had its goal to fill this gap. Finally, literature of this stream provides future research with multiple facts and arguments about the current experience of the faculty members use of teaching methods that provide meaningful and relevant teaching for students.

Student Response Stream

Discussing further three levels of teaching as defined by Biggs and Tang (2007), Level One does not need much effort from the professor because responsibility to receive a good command of the subject lies on the student who may "lack suitable study skills" (p. 17) or, vice versa, be strongly academically oriented. The teacher is not a participant but only a lecturer, monitor and assessor. In this context, there is an argument between researchers on the lecture as the main instrument of teaching in the university. According to Revell and Wainwright (2009), lecture will still remain one of the main ways of

teaching though if conducted in a masterful manner, it will produce a successful outcome. They concluded that

> whilst there is probably no such thing as an entirely unmissable lecture, attendance rates are significantly enhanced by three key factors: (i) a high degree of participation and interactivity ('active learning'), (ii) a clear structure which enables integrative links to be more easily made, and (iii) a passionate, enthusiastic lecturer, who can bring a subject to life for students. (p. 1)

The authors compared student responses on what makes the lecture unmissable—mandatory attendance or presenting the material. In the eyes of students, the lecture should be unmissable if the focus is narrowly on assessment, or in other words, learning is surface. But if learning is deep, and students are interested in the subject, the lecture becomes truly unmissable.

> We always go to our lectures because we want the learning experience. We always turn up. We don't look at the module guide and go 'that's a really boring subject, let's miss it. 'We go 'oh that's what we're doing today'. We want to get the most out of our education, we want to use everything we're given, we want to make our parents proud. That's the point of coming to university-furthering your study is what drives you. (p. 10)

Professors encourage students to learn in order to receive knowledge and skills, not only to have to pass a course. Students define the unmissable lecture as the one that makes them to be involved and actively participate. They speak high about interactive lectures. Exley and Dennick (2004) present evidence that even in big groups of students who are at the lecture, high participation is possible. It is more difficult than in a small group but creative professors would divide students into small "buzz groups" and then, "snowball" groups in which students join to continue discussions. Bonwell and Eison (1991) provide an example of a lecture when students can make presentations to the class, read home written assignments and be criticized by other students. Speaking about an unmissable lecture, students also express appreciation of the synthesized and most

current information, and a possibility to see a big picture. According to Wright (2005), students highly appreciate passion and charisma of the lecturer. Many academics are famous for their unmissable lectures. These arguments do not tie the lecture itself to Level One teaching, which blames students for their failures.

Level Two focuses on teaching technique that may create more interesting and lively discussion of the subject problems. Ramsden (1992) insists that causing interest is an important teaching principle. "When our interest is aroused in something, whether it is an academic subject or a hobby, we enjoy working hard at it. We come to feel that we can in some way own it and use it to make sense of the world around us" (p. 98). But interesting discussion does not guarantee that it will bring the student to productive learning. "It's about what *I* the teacher am doing, not on what they the students are learning" (p. 18). This kind of teaching is teacher-centered and focuses more on the classroom management than on "facilitating learning" (p. 18). At this level, the teacher is competent but it does not make him effective because involvement of his students in the process does not necessarily lead to new knowledge and skills.

Biggs and Tang (2007) state that the question "how well the students have learned" should not be ignored (p. 19) because positive student response to teaching is the most important in the teaching/learning process. The authors insist that only Level Three thinking about teaching looks at what a student does when a student is centered, and teaching supports learning, which makes this level absolutely depart from Levels One and Two. Within Level Three, mastery of teaching reaches the possibility to produce the expected student outcome when students become experts of the subject and acquire the necessary skills. Level Three allows learning to become a pleasure because students

experience "positive feelings: interest, a sense of importance, challenge, exhilaration" (p. 25). Students start to understand that their meaningful and appropriate engagement leads to their academic and future job success. Simultaneously, students expect encouragement on the side of the teachers because those teaching approaches that are not aligned with student success may play the role of initiative killers. Ramsden (1992) says that if teaching is making things hard or professors frighten students, it is difficult for "students [to] feel that a subject can be mastered; it [will not] encourage them to try things out for themselves and succeed at something quickly" (p. 98). Saret (2007) notices, "Research has shown that a teacher's expectations have a powerful effect on student's performance (Forsyth and McMillan, cited in Menges, 1991). If you act as though you expect students to succeed, they are more likely to succeed."

Besides, there is sense to stress the idea that students appreciate if they perform activities carrying some value to themselves and the society (p. 32). In fact, if students do not see that what they do is in need, and the professor does not encourage them, they lose interest in schooling and do not want to learn.

Students may be motivated if their academic activities are meaningful and worthwhile. Problem-based learning, as one of the modern methods mentioned above, serves this goal because it provides the shortest way of receiving professional skills by solving real-life problems. In this context, teaching builds up a good knowledge base and a feeling of ownership over their learning.

Biggs and Tang (1979, 1987, 2007) analyze teaching from the point of view of cognitive psychology but they have a common focus with other theoreticians – what learning is in the institution. Entwistle and Ramsden (1983) looked at teaching from the

psychology of individual differences. Even earlier, Ramsden spoke about good teachers who are able to create assignments corresponding to the student's level of understanding based on the assumption that not all students can have the same level. "It is worth stressing that we know that students who experience teaching of the kind that permits control by the learner not only learn better, but that they enjoy learning more" (Ramsden, 1992, p. 102). Marton and Saljo (1976) invented phenomenography ("the idea that the learner's perspective determines what is learned, not necessarily what the teacher intends should be learned" (cited in Biggs, 2007, p. 20). All the mentioned researchers agreed on the necessity to confirm the interdependence of teaching and learning. "Instructors should always be conscious of the fact that teaching, learning, and assessment issues are intertwined and each can be used to enhance the long-term acquisition of knowledge" (Fairfield-Sonn, Kolluri, Rogers & Singamsetti, 2009, p. 11). These authors present an example of teaching an undergraduate Statistics Course, during which professors rely on data that are difficult to understand and do not enhance learning by using any teaching technique. But when they experimented with employment of additional teaching, learning outcome became apparently more successful because, according to Biggs and Tang (2007), students got the feeling of self-efficacy "I can do this; this is my thing" (p. 33). Not only instructors notice the interdependence of teaching and learning but also the students. The study conducted by Seemiller and Grace (2015) demonstrated, "Two-thirds of Generation Z students believe that preparation for life in the working world is a joint responsibility between the institution and the student. This expectation is something to make note of to ensure that Generation Z students are making wise college choices for what they need but also that institutions can meet the expectations they have"(p. 129).

Students respond not only to motivation and value but also to the feedback that they receive from their professors. Feedback connects teaching to learning thus making its definition a "consequence of performance" (Hattie & Timperley, 2007, p. 81) as the most appropriate for the goals of this paper. The way lecturers and tutors provide information on students' performance affects students' response to their teaching. The recent emphasis on student-centered research in education is important for alerting teachers to know that nowadays students assess from their perspective what good teaching is. Rowe (2010) presents study on the significance of professors' feedback for students as the way to improve quality of learning. Learning enhancement, meeting students' needs, provoking increase of motivation and enthusiasm, stress reduction, social and intellectual interaction, expression of respect, indication of caring, and other valuable features positively influence the process of learning (p. 12). If the teacher states that students' success is up to them, it does not help in the usually complicated process of learning; but if the feedback as to progress goes like "This is what you did, this is what you might have done, this is how to get a better result" (Biggs & Tang, 2007, p. 33), it encourages beliefs in future success. In this scenario, the teacher does not compare a student with other students but approaches him/her with criterion-referenced assessment. The message about success or failure conveyed to students should not be hopeless but hopeful, according to the advice of the mentioned authors.

Biggs and Tang (2007) argue that the climate created by the professor significantly influences student success. Dunkin and Precians (1992) present an example how award-winning university teachers continually seek students' criticism in order to use more effective teaching methods. In many cases, students state that they feel anxiety

when the professor mistrusts them or threatens with sanctions; they stop thinking about the engagement and focus only on the outcome that can be received by all means. Biggs and Tang (2007) also write about such response as cynicism expressed by showing no interest in the activities, playing games, setting distractors, or fulfilling assignments to fit, for example, the word limit. Students explain this response by the teacher's attitude to their class and subject when the teacher shows that he/she is over busy or pays more attention to the deadline than to quality, or wants to cover too much material without checking if students can learn it, and other factors. A reflective professor would learn from student responses and change some practice, which will show professional growth and improve learning. But if the professor is reactive, it will keep him/her at Level One, or blame-the-student approach, and become an obstacle to successful learning. To receive more positive response from students, Biggs and Tang (2007) recommend professors to follow not only reflective theory of teaching but utilize transformative reflection, "transformation from the unsatisfactory what-is to the more effective what-might-be" (p. 43).

In terms, the described climate corresponds to Theory X. Another attitude, or creating climate where every student is a center of attention, refers as Theory Y. Professors who are committed to Level Three of teaching put student interests as top priority. In their classrooms students have more freedom to use judgment and make own decisions. Biggs and Tang (2007) admit that there are risks but effective professors argue that "the educational benefits outweigh that risk. The aim of teaching is to support student learning, not to beat student deviousness" (p. 38). Morris (2011) notes that students respond better to the climate created by younger professors who are, actually,

representatives of Generation X (born from 1964 to 1980). Helms' (2010) research proves that Generation X faculty interact with students less formally than faculty of older generation. Seemiller and Grace (2015) confirm, "With their problem-solving nature and desire to be consulted in decision making, it is a win-win scenario for those working with Generation Z students to be transparent and involve them in addressing issues. Not only can this be empowering for the students, it might result in a great solution" (p. 133).

As mentioned earlier, meaningful learning process requires developing skills to solve organizational problems. Currently many employers complain that new graduates have not acquired such skills in universities, according to the study of Goltz, Hietapelto, Reinsch, and Tyrel (2008). The reasons explaining lack of such skills are different, for example, emphasizing individual over group achievement (Schmuck, 1997). Professors may teach these skills by introduction of new integrative curricular models directed on problem solving and teamwork. Teaching would include several problem-solving stages and reinforcement through exercises and assignments. Students respond both with short and long-term outcomes. Goltz et al (2008) state,

> The immediate success of this holistic treatment is directly evident in student evaluations of their peers' teamwork skills at the end of the course. The persistence of this learning is evident from workplace skills assessment in subsequent coursework and from ratings and comments found in senior exit and alumni surveys. In conclusion, we believe the relevance of course concepts to the students' current experiences creates increased engagement in learning and retention of course concepts, and is an example of the kind of active, collaborative course design called for by the NSSE (2006). (p. 22)

The role of experiential learning as a new pedagogical direction based on logic and mathematical approaches becomes significant because it "allows students to learn hands-on and experimentally by applying previously learned content to areal-life setting" (Seemiller & Grace, 2015, p. 123).

This literature review would not be full if it did not take into consideration responses from diversified groups of students. Love, Trammell, and Cartner (2010) studied why African-American students see themselves unsuccessful among white students. The campuses do not "embrace" (p. 1) their Afrocentric heritage. They feel unconnected to the learning and living environment (Gloria, Kurpius, Hamilton, & Wilson, 1999). Holmes, Ebbers, Robinson, and Mugenda, (2001) find out that African-American students cannot assimilate because the European system of education considers them "noncompetitive collaborative learners" (p. 45). Saret (2007) indicated that cultural background affects learning styles. According to Sanchez (2000), Latino students expect feedback, group work and active experimentation (p. 42).

Another group of students that needs special attention is the new generation. Scholars discovered that the majority of today's students present Generation Y (or Millennial born in 1980s) and Generation Z (born in 1990s). They do not respond positively to traditional, particularly, lecture teaching style. Seemiller and Grace (2015) found out, "Z students "do not like to be lectured at" (p. 125) and:

> prefer an intrapersonal learning method … working in group settings, a sign of their desire for social learning. They want to have some role in setting the tone and pace for their own learning but also see the value and benefit of working with others or at least near them. (p.125)

Minifie et al. (2011) state that these generations do not imagine studies without new technologies. The study of undergraduate students involved in the Entrepreneurial course shows that collaborative learning, team-oriented assignments, refraining of the lecturer from lecturing the text, problem discussion, coming out with questions and getting immediate answers from the text, teacher and peers opened a wide door to developing analytical skills and ability to apply knowledge to the solution of real-life

problems. They responded to this method of teaching both with high quality learning outcome and comments of high rating: "learned more in this class than any other", though "worked harder in this class than any other" (p. 15). They preferred learning by "doing" to "listening." Besides, the course was provided through wide use of computer technology that made their learning more effective. The assessment was based on the regular communication and encouragement from the side of the professor. All these constituents made the course outcome successful.

The literature witnesses that modern students respond better to blended courses. The research mentioned earlier in this paper conducted by Kavadella et al (2012) demonstrated that undergraduates taking the blended (face-to-face combined with online) dental course demonstrated better knowledge than students in the traditional group. They found blended learning more effective, motivating, and easier to access at any time.

The suggestion may be that new technologies reach undergraduate students immediately. But in fact, there are many obstacles, according to Gates (2013) who states that many of today's students are disappointed, stuck, and overwhelmed because of the challenges. The worst part is that they leave schools. Gates (2013) offers re-inventing the system of education calling it "remedial" education. The example is redesigning the course of developmental math performed by the National Center for Academic Transformation. Originally, professors lectured this course by the traditional teaching model. Not all students comprehended it equally. Gates (2013) describes how the new model works:

> In the new model, instructors circulate in the room as students get computer-based math training that teaches them exactly the thing they need to learn in the exact order they need to learn it. They're drilled on each idea until they master it, and

> then they move on to the next one. The teacher is there for one-on-one explanations and for encouragement.

Advantages are visible: all students understand the material; it is not boring for advanced students; tests give immediate feedback; instructors receive more time for individual teaching. Gates stresses the fact that innovations bring more advantages, reduce costs, and increase retention of students. At the same time, according to Gates (2013), technology does not substitute the instructor but only changes the role of the instructor who now can do what computers are not able to perform – establish personal communication, organize students in groups, and stimulate students' interest. Though MOOCs (massive open on-line courses) are very popular and productive they should not function as "flipping the classroom" but play the additional resource for professors and students. Gates (2013) appraises combination of "smart" technology and a teacher as a human element, "This may be the biggest untold story of education technology: When used properly, technology can amplify the human element in education… The smart use of technology doesn't replace faculty – it redeploys them, to the benefit of the students."

Students give positive feedback to teaching methods that involve communicating ideas. Acting as one or acting in concert in the variety of teaching methods positively impacts learning (Fredendall, Robbins & Moore, 2001). Moshavi (2001) and Raab (1997) state that acting helps improve teaching and causes students to think "out of the box." Baruch (2006) makes an attempt to enlighten on the effectiveness if this method in the university stressing the fact that it is not developed in the sense of its practical use and techniques. A good example of acting, or role-play, in the university is case study at the MBA program in the Harvard University (p. 14). At the same time, the author warns against pitfalls and risks in cases when a lecturer is not able to perform effectively by

putting on this or that mask that would, eventually, lead not to positive but negative impact on learning. So the lecturer should be very selective in assigning roles in some definite classroom situations because this way of teaching may serve a perfect stimulus for students but also become distracting and ineffective if not used skillfully.

In conclusion, student responses express student expectations. In the 21st century students have varied experiences and they expect universities to be able to develop multiple skills needed in their work and career. Literature shows that students expect high quality and immediate support services, easily available technology and better infrastructure. Though the review presents some evidence that currently students expect better quality of teaching, there is no clear distinction what methods of teaching bring them the biggest satisfaction. The above mentioned studies recognize that students have to be active participants of the teaching/learning process because universities and professors admit that collaboration with students in assessment, teaching, course planning and the improvement of quality is crucial nowadays. Students become central contributors to the teaching/learning process. On the one side, students evaluate what works well; on the other side, they can contribute by adding new ideas. Such collaboration and student engagement create a dialogue that can lead to improvement. The best cases demonstrate that teaching, learning, and evaluation should be meaningful if they are suggested to be useful.

Professional Development Resources Stream

The authors who contributed to this literature review came to the consensus that engagement of students in the teaching/learning process is a key factor that guarantees their success in studies and increases retention in school. There is a question what

resources would help faculty to engage students successfully. Handelsman et al (2004) assume that universities are able to promote change in teaching approaches by implementing modern teaching methods because there are multiple resources that they can use:

> development of peer-reviewed instructional materials, …providing venues for experienced instructors to share best practices and effective teaching strategies, …forming educational research groups, …incorporating sessions about teaching into seminar series, developing parallel series about teaching, or establishing instructional material" incubators" where researchers incorporate research results into teaching materials with guidance from experts in pedagogy, organizing education workshops and meetings. (p. 522)

Higher educational institutions need to support the existing methods and create new ones to teach the faculty to teach the students. Professors may use the existing literature on teaching that can be found in the libraries or on websites. A good example of recommendations titled "Classroom Practice: Strategies for Improving Retention" is presented by Saret (2007). It is a detailed manual for a professor to follow if he/she wants students to be successful in the higher education establishment; the recommendations include but are not limited to building connections with students, creating a positive atmosphere, providing an environment that accepts diversity and respect for every person, using individual instructional techniques. Saret (2007) finds support in Wlodkovski and Ginsberg (1995), "Our best experiences in teaching are those where we connect with our learners and are of genuine assistance to them" (p. 1).

From a faculty development perspective, collaborating with other faculty members, for example, in research is another resource for growing in the professional career (Pifer, 2010, p. 33). Eddy and Mitchell (2012) state that collaboration fights solitude and works well if encouraged. Encouraging collaborations may be a way of

repacking faculty work and keeping the initial spark that started individuals on the pathway to the professoriate. The knowledge base becomes more accessible.

Ferguson and Wilson (2011) present an example of an effective resource for professional teaching development. They discuss co-teaching as collaboration that allows for synergy in the classroom and meets each student's individual needs. The idea of co-teaching is supported by Roth and Tobin (2004) who state that co-teaching serves as continual professional development and increases teacher morale. Ferguson and Wilson originate their idea of professional collaboration from the business development, of which as stated by Henry Ford, "Coming together is a beginning. Keeping together is progress. Working together is success."

Ancient wisdom expressed in the Latin proverb "By learning you will teach; by teaching you will learn" is supported by Ramsden's (1992) research. Professors in the universities learn from students and can use this resource to improve their teaching methods.

> Effective teaching refuses to take its effect on students for granted. It sees the relation between teaching and learning as problematic, uncertain and relative. Good teaching is open to change: it involves constantly trying to find out what the effects of instruction are on learning, and modifying the instruction in the light of the evidence collected. (p. 102)

Another resource for professors in cases when they need pedagogical assistance might be system of mentoring and supervision. Literature on mentorship is scarce. It remains true even in 2008 when Farley, Casaletto, Ankel, Young, and Hockberger conducted research on resources that junior members of the medical faculty could use. They state that there is significant lack of resources in the area of mentoring that leads to the challenges in the professional development. But the idea of the importance of

mentoring as an effective resources is vital. For example, SAEM (the Society for Academic Emergency Medicine) developed first a virtual mentoring program for medical students, and then a similar program to provide long-distance mentorship for faculty. Long-distance approach still remains questionable because it does not provide "close reciprocal relationship between mentor and mentee that underlies successful mentoring" (p. 667). But the general effort to fulfill the need for mentoring is warranted. Speaking about scholarship of teaching at the 1954 lecture at the 200th anniversary of the Columbia University, Oppenheimer (The world's great speeches, 1999) stressed the fact that mentoring is the main function of teaching, "Thus it is proper to the role of the scientist … that he teach, that he try to bring the most honest and most intelligible account of new knowledge to all who will try to learn." (p. 643)

More recent literature witnesses changes in attitude to mentoring. Morris (2011) observes that the new faculty present Generation X (born from 1964 to 1980), people who are proficient in technologies and accepted by students with more enthusiasm than other professors. But this generation needs professional development in using teaching methods to meet the requirements of teaching a centered student. The author is confident, "Mentoring in all of its dimensions would certainly be central to integrating the new faculty and to enhancing the opportunities for success" (p. 288). Morris advises to select the mentoring program that works best under the circumstances – mentors may be assigned; mentors may be selected; or mentors may go through the competition. Gose (2011) presents a mentor as a person who supports and encourages a mentee in all spheres of life activities, and can represent various layers of the educational community in regards of the age, department, or facility.

The resource that new or pre-service teachers can use is taking advice from experienced and skillful individuals. Cooperation between new and expert teachers would lead to the professional feedback and crowned in professional development. Potentially, new teachers can be stuck in the process because of confusion and panic. Though according to Crow and Smith (2003, cited in Ferguson and Wilson, 2011), "teaching is, and should be, fun", it may occur to be the opposite. There is a way-out of this situation suggested by some universities when they start programs through which new professors get field experience by observing, practicing, and developing teaching skills.

Professional learning continuum is one of the ways to become perfect in the teaching profession. Fullan (1998) states, "The teaching profession itself will have to undergo total transformation in order for substantial progress to be made." The institutions will build programs for professional learning depending on partnership of institutions and using leader teachers for growing positive experience. An example of such programs is model of collaborative peer consulting, the way for the pedagogues to improve professionally. Twale and Schaller (2002) present it, "A sense of community develops through the creation of a group identity and through the provision of opportunities for dialogue and conscious curricular integration. We believe we have created a program that successfully fosters these characteristics".

Steinert et al. (2005) present a program that they investigated in their research conducted at the medical school. They discovered that the faculty did not possess enough skills to teach professional values. The method of role modelling that they had used traditionally, stopped being adequate. A new program was suggested to help the professoriate. It was designed to help the faculty in professional development. It became

able to teach professionalism to the future doctors. Thus changes in teaching led to improving student outcome.

The 21st century being a technology age requires using technology by professionals in various areas including nursing profession. Felton (2000) states that receiving necessary skills by students can be successful if the faculty introduces technologies and instructs students how to use them at work. First, professors need to learn, which makes their professional development continuum. Learning is possible in many higher education schools when professors receive instructions on how to use emerging technologies. The forms of learning, according to Felton (2000) are multiple such as day-long and hands-on workshops, conferences, small group instructions, participation in the computer fair and others. The author notices how such resource as a library changes. Technologies allow creating of electronic databases, computerized indexing, and permanent access to network. They revolutionize ways of storage and spreading of the information. The library loses its traditional way to store literature. Nowadays the value of library is its potential ability to connect users of information. Function of the library as storage and librarians as faculty consultants disappeared, according to Meulemans and Carr (2012). They noticed a shift from service orientation to partnership in student learning. But the authors warn that there is still no equality between the faculty and the librarians because the faculty get support from the academe, and the librarians do not seem to be part of the institutional system.

Chang et al (2007) report "on evaluation of a scheme to improve University teaching through action research, which was selected to evaluate the teaching/learning scheme as the one that looks into real life experience" (p. 1). McLaughlin and Samuels

(2002) point out four educational discourses to improve quality of teaching: reflective practice; interdependence of teaching and research; inquiries into student learning; educational development; and teaching as a form of scholarship (p. 3).

It looks like a good example for many higher schools to follow in order to facilitate quality practice, assist staff to be more effective, to be innovative and practical; and to achieve client satisfaction. Feiman-Nemser (2001) concludes:

> The need for a continuum of serious and sustained professional learning opportunities for teachers is clear. The task of building such a system is daunting. Yet there has never been a better time to tackle the problem. An infrastructure of standards for teacher development has emerged at the national level and the idea of a professional development continuum has captured the attention of reformers, educational leaders, and policy makers at all levels. (p. 1049)

The existing literature confirms that the question about faculty resources to engage students successfully needs professional answer. It becomes evident that the universities should become creators of programs for educating faculty in effective teaching methods. In comparison with scarce availability of resources in the 20th century, the question of resources starts to get answers. Professors may find wells of professional literature including recommendations in the libraries or on websites. Universities promote change in teaching approaches by creating peer-reviewed manuals, providing opportunities for new instructors to get acquainted with best practices and effective teaching strategies, forming educational research groups, designing teaching methods seminars, combining data on teaching into so-called "incubators." Another resource is collaborating, which becomes very important for new faculty members as they feel very isolated in the academe. Co-teaching also serves as continual professional development and increases teacher morale. The review notices that it does not only increase student but, at the same time, teacher retention. Surprisingly but truly, learning from students is

the resource that research confirms as very effective for developing more engaging teaching tools. The idea of the importance of mentoring as an effective resource is vital. Professional development becomes challengeable. But more recent literature witnesses changes in attitude to mentoring. New generation of teachers, most of them representing Generation X, though proficient in technologies, may feel stuck because of confusion and panic, and needs professional development in using teaching methods to meet the requirements of teaching a centered student. They ask for advice and cooperation with experienced and skillful professors. Some institutions build programs involving leader teachers for demonstrating how to foster the best teaching characteristics. Serious risk for a new professor may become feeling of isolation that can be eliminated by involving this professor into networking and widening opportunities for active participation in the professional faculty life. Today it is mandatory that professors receive instructions on how to use emerging technologies. For professors to learn, various forms are possible - day-long and hands-on workshops, conferences, small group instructions, participation in the computer fair and others. The research shows that the library previously known as the main resource changes its function. Least of all, it is a storage now. With so many revolutionized technologies carrying electronic databases, computerized indexing, and permanent access to network, the library does not only spread the information, the library connects users of information doing the job that is very necessary for teachers as they can easily exchange methods and vehicles of teaching. Teaching effectiveness may be checked through the evaluation of the teaching/learning process performed, for example, by action research. Finding scientific resources that support professional development of the faculty bases on theoretical principles such as reflective practice, interdependence of

teaching and research, inquiries into student learning, and others. The literature enriches this stream with the knowledge about existing resources for the faculty, reveals gaps via insufficient researches and underperformed analysis of findings, and ways of implementation in the practice of teaching.

Summary

All three streams are interrelated by the topic of the study—influence of teaching on students' achievement in the area of undergraduate higher educational school. They are focused on identification of obstacles that cause low retention of undergraduate students in the university. They look for assisting resources to make the teaching/learning process successful. They also reveal where the gaps are and how to fill them. They show examples of how to improve the process of education. All the streams prepared the researcher to the field investigation. Literature pieces were directed to answer several research problems.

The first stream investigated what teaching methods are used currently. The review showed that higher educational establishments nowadays look more precisely than in the past at how the subjects are taught. Teachers have to transform their skills and abilities to go along with time—to be prepared spiritually, to be technically knowledgeable, and to be ready to work with the new generation of undergraduate students. The second stream revealed that today's students present a new phenomenon in the history of higher education. Student responses demonstrated that though schools perform a lot of changes it is not enough to meet the requirements of the current changes in school life. Students' vision of teaching connects the principles of universities and the real world. The third stream demonstrated that it is challengeable for professors to find

effective pedagogical resources. This stream also identified some new resources that can become very useful for successful teaching/learning process. The third stream showed that there is a strong potential supported by the university leaders and faculty. In conclusion, working with literature demonstrated that to bring the higher educational system of the United States to perfection, scientific research and evaluation had to be performed.

Chapter 3: Research Methodology

Introduction

The purpose of this study was to generate a theory that would explain influence of academics' pedagogies on the university students' engagement in learning. The research attempted to create the model of teaching in higher educational institutions of the United States of America. This qualitative study examined best practices of university professors for transferring knowledge of the subject to students in the class and strategies used for student-centered teaching. The research explored the pedagogical methods used to effectively integrate knowledge, generate examples and explanations, arrive at creative solutions to problems; it collected and systemized resources for professional improvement of higher education instructors; and it observed the feedback and response of undergraduates as main stakeholders of the process.

This study focused on providing the answers to the following questions:

(1) What teaching methods are the faculty members using to provide meaningful and relevant teaching for students?

(2) How do faculty members describe student responses to pedagogies that bring meaning and relevance to learning?

(3) What professional development resources do faculty believe would facilitate reshaping their pedagogy?

The questions might seem too wide or general before the research started but it was the intention of the researcher not to influence emerging directions of the study. The questions led to the identification of a central category based on the generation of data. It occurred to be the most important conceptual element connecting other subcategories. Strauss (1987) writes that the core category "must be central, namely, related to as many

other categories and their properties as is possible … must appear frequently in the data … and must develop the theory."

Hence this research was performed by using grounded theory methodology (GTM). It means that the theory or formula of teaching was not be based on the existing theories but was "inductively derived" (Johnson & Christensen, 2012, p. 400) from the "gathered and analyzed data" (Strauss & Corbin, 1994, p. 273). It explored how professors work with students and what teaching resources for professional development they use; it also generated comprehensive recommendations for undergraduate faculty professional growth and establishment expressed via theory, formulae, and scheme.

Selection of the grounded theory methodology for this research was based on the expectation that, as any theory, the created theory would be used by professionals in the teaching world. With time passing by, there would emerge a necessity to modify this theory and apply to newer experience. It would have a character of the living body to adjust to circumstances. The research questions led to the identification of a central, or core, category based on the generation of data. It was the most important conceptual element connecting other subcategories. The researcher selected a grounded theory method because she planned to generate a "unified theoretical explanation" (Corbin & Strauss, 2007, p. 107) for the quality issues in teaching/learning process in higher education, and that is why she needed "to move beyond description and to generate a theory" (Creswell, 2013, p. 83).

This chapter includes explanation why an inductive approach was appropriate to explore the subject area through the participants' perception. The researcher also discusses other reasons for selection of grounded theory methodology such as lack of

existing theory on the connection of the quality of teaching and the students' outcome, and expectation that, as any theory, the created theory will be used by professionals in the teaching world. Gallos (2008) states:

> Good theories are pragmatic and grounded. They explain and predict. They serve as frameworks for making sense of the world, organizing diverse forms and sources of information, and taking informed action. Theories come in all shapes and sizes. They can be personal…They can be research-based models that stem from experiments, formal explorations and analyses, and field studies of practice… Whatever their origin, theories guide behavior… (p.163)

The created theory might acquire sense for university professors or it will cause subject matter discussion because as Gallos (1967) assumes that theory may "reflect the deep human need for order, control, and meaning" (p. 164). If professors decide to use it, they are suggested to plunge into the experience when a theory "travels well in all kinds of situations" (Fullan, 2008, p. 125). Fullan (2008) explains what kind of theory is the one that travels, "Theories that travel well are those that practically and insightfully guide the understanding of complex situations and point to actions likely to be effective under the circumstances" (Fullan, p. 1).

This chapter includes the description of the GTM as projected on the intended study in every detail - research design, rationale, method sections, and stages of data collection. It provides descriptions of the population and site.

Research Design and Rationale

The grounded theory methodology selected for this research is suitable because, as Glaser (2001) and Strauss and Corbin (1998) put it, its purpose is to identify complex and unknown social processes with the goal of developing theory. GTM goes beyond measuring attitudes across large samples what is characteristic for earlier popular quantitative methods; it learns individuals' perceptions on the basis of powerful

principles. Marshall and Rossman (1999) argue that this methodology is qualitative because it has features of other known qualitative methods as it focuses on "everyday life experiences, appreciates participants' perspectives, investigates interactive process between the researcher and respondents, describes phenomena, and depends with full trust on subjects' words". This research described participants' everyday life experiences; it listened to professors' viewpoints and interpreted them with full trust on both sides; it carried a recursive nature of the constant communication between the participants and the researcher, looked into patterns and analyzed them striving to come to findings. Another assumption was that not all concepts related to the relationship between professors' preparedness and students' outcome had been identified. In addition, the literature found out that students' outcome in the relationship to their professors' teaching skills has no inclusive study in the United States therefore recognizing it as a gap in knowledge about the impact of teachers' preparation on students' success. Charmaz (2006) considers that it is the identification of such gaps and limitations that characterizes the element of discovery in grounded theory, "When inevitable questions arise and gaps in our categories appear we seek data that answer these questions and may fill the gaps" (p. 3).

GTM may be either substantive or formal. Substantive theories interpret problems in a specific area. Formal theories explain generic issues (Strauss and Corbin, 1998). This research intended to investigate how strong the factor of professor-student academic relationship is in the area of undergraduate studies. To achieve the goal, substantive theory was found to be sufficient. To apply it in the area of graduate studies, hypothetically, a formal theory is necessary. Charmaz (2006) and Glaser (1992) state that a formal theory constructs ideology. In other words, each substantive theory is a starting

theory that can help refine the formal theory. This study developed a primary substantive theory because the scope of one dissertation was not as wide as to create a formal theory to be applicable to wide areas.

Though GTM, originally, and according to the definition, does not to study the literature before the research (Glaser, 1978) for avoiding the influence on the researcher's ideas, the researcher decided to review literature early to locate the existing literature, and to learn if there were conclusive answers to these research questions on existing theoretical models. Charmaz (2006) recommends this step before the first data collection. Acquaintance with literature also satisfies requirements of the university's research committee for the research proposal.

According to Glaser and Strauss (1967), grounded theory has four following features: fit, understanding, generality, and control. Applied to the research on teaching methods that professors select in the undergraduate area, the created theory is supposed to fit the true data, not personal beliefs for any professor to be able to use it; the belief was that the theory would be understandable to the level that it might be used in similar to the undergraduate circumstances—there should not be any difficulty how to operate teaching methods; the theory generated from the data will have the generality to be applied in a wide scope—professors of many disciplines will be able to use it; professionals will get the control over the process—professors will use it with flexibility to improve the outcome of the teaching/learning process. Later Glaser (1978, 1992) uses terms fit the data, work in terms of a useful explanation, be relevant to actual problems, and be capable of being modified by future inquiry. These are four criteria on which the theory may be assessed.

The mentioned qualitative criteria cause usage of the theoretical sampling technique. Grounded theorist does not know the size of the sample population before the study begins. When the study reaches saturation point meaning that no new data emerge, the size sample is recognized as satisfactory. Another feature of the theoretical sampling is that "informants are not chosen on the basis of their representativeness, but rather because of their expert knowledge of the phenomenon under scrutiny" (Smith & Biley, 1993, p. 3). According to Charmaz, "Theoretical sampling is all about the concepts and the categories you are developing, and the testing that you do of them" (Puddephat, 2006, p. 11). This type of sampling leads to findings. According to May (2006), "the findings are the theory itself" (p. 148).

Other samplings were included. Snowball sampling was used for this research because it was hard to find, for example, expert teachers, or connoisseurs of their subjects, as this does not exist as title—there should be some more characteristics to "title" the teacher as expert or connoisseurs. A few participants were ready to suggest other people. Some Internet options that led to the information were utilized. Anyway, snowball effect was present because of adding new participants.

Site and Population

Population Description

The population that was relevant to the problem of this research included university professors working with undergraduate students. The researcher included the North Valley University professors teaching sophomores and seniors because the literature proved that retention of students after the first year of studies is high, and the

researcher considered more concentration in senior undergraduates because retention drops significantly during the second year and later.

After final approval by the internal review board, the researcher recruited participants through meetings, phone calls and emails. During the initial conversation the researcher introduced the purpose of the study to the participants, explained the process of obtaining consent forms, and explored each person's interest in the project. The initial purposive sampling criteria included professors who teach undergraduate students. Subsequent theoretical sampling was based on the qualitative criteria of saturation of the code categories, relevance to the emerging theory, and added variation of perspective (e.g., time experience of teaching; subject objectives; diversity of students). The researcher suggested that on the basis of the sampling criteria, there should be from ten to twenty participants. Twelve professors agreed to take part in this research and were interviewed. All the professors were Doctors of Philosophy. All of them had experience of working with undergraduates. Following features of theoretical sampling, the researcher did not intend to exclude cases that would not support her arguments. Deviancy was presented by comparing professors with different time in the career and selecting novices as well as more experienced university instructors. For the goal of getting acquainted with the pedagogical expertise in the subject, the professors were drawn from different departments. The researcher offered the participants to choose the convenient time and place of the interviews. The interviews were face-to-face by Skype and phone interviews.

Site Description

The institution was the North Valley University. This university is one of the twenty-three universities comprising the California State University system. It offers 126 types of Bachelor's degrees. About seven hundred professors are employed by the North Valley University. The selection of this site for the research was promising as it opened the opportunity to study the teaching experience of professors working in many fields of education, learn about views of teachers on the available resources, and learn what they recommend.

Site Access

To get access to the site and participants, the researcher applied for the permission of the Drexel Institutional Review Board because the study involved human subjects. After the authorized Drexel University permission, she obtained permission of the IRB of the North Valley University. Then professors were notified through the university email and/or direct contact. Emails or access letters clearly stated that participants would choose the most convenient for them time and place of the interviews. Skype or phone conversations also were interview sites.

Next step in accessing the site was sending an informative letter to the participants and introduction of the consent form that included a short description of the study. The university administration expressed suggestions and insights in identifying individuals who could be beneficial to the study.

Research Methods

Creating a new theory, GTM explains phenomena by the collected empirical data rather than basing its conclusions on the existing literature. The data collection for this study included in-depth semi-structured face-to-face interviews and artifacts but also considered other sources of data such as existing research literature and quantitative data.

Description of Each Method Used

Interviews. Semi-structured face-to-face interviews with open-ended questions were used for this study. The researcher prepared an interview protocol form containing the questions to be asked of the interviewee. The protocol also included specific details of the interview such as time, location, and setting. Finally, it had space for the field notes taken during the interview. The manner of conducting interviews was recursive called bridging by some theoreticians, to "either approach a higher level of competency or return to a more elementary level of learning in circular, systematic manner" (Gordon, p. 146). Recursive method was appropriate for comparing, interpreting, and refining data for emerging a new theory originating from the gathered data, and not from the theories known and created before this research.

Instrument description. These interviews fostered the researcher's interactivity with participants. Data were collected in their natural settings. Semi structured character of interviews freed space for additional information. The researcher asked questions by using the interview guide approach that is by asking open-ended questions in any order. Simultaneously, the interviewer covered the same general questions and topics with all interviewees. Some interviews were recorded.

This researcher, as a professional in the field, was able to construct relevant to the topic questions where she considered herself an instrument of the interview that does not influence responses of the university professors. She aimed to know "what is happening in the field" currently (Charmaz, 2006, p. 44).In accord with Charmaz's point of view, the suggested interview had its goal to serve constructing a theory with complete understanding that "neither data nor theories are discovered. Rather, we are part of the world we study and the data we collect. We construct our grounded theories through our past and present involvements and interactions with people, perspectives, and research practices (2006, p. 25). The interviewer used three types of questions that could support building a grounded theory. They were a) open-ended used to start an interview and create rapport of trust and professionalism, b) focused questions to concentrate on problems and ways to resolve them, and c) ending questions to evaluate future options:

I. Initial open-ended questions

1. So far as I understand you have a long (not so long, short) experience of communicating with students. How long have you been teaching?

2. How did you prepare yourself for a teaching career? Did you receive any special education?

3. I am sure that for all these years you have formulated your teaching philosophy. Can you share with me what is your formulation? Do you think that having a teaching philosophy makes you a better teacher? If so, why?

4. How would you define your teaching position – a teacher, a researcher, a lecturer, an instructor (more)?

II. Focused questions

1. If you use a teaching method, is it easy for you to reshape or modify it to satisfy needs of some given group of students? What is your attitude?

2. Vygotsky said that a child needs help a more capable instructor to go to the next level of development. Our professors need to use this scaffolding theory to become successful in teaching students. How would you interpret this idea for teaching students in the university because Vygotsky was discussing teaching children?

3. Do you consider teaching quality a strong factor to keep a student in the program?

4. Do you feel that a grade of a student is your concern? Is it a responsibility of a professor to create a good student?

5. What is usual (approximate) percentage of students that do not finish your class satisfactorily?

6. What affects quality of learning more – students' attitude and diligence or professors' skills of involvement and teaching?

7. Do you know how students rate you? Do you change your methods after you see students' comments in rating?

8. What is your way to work with a student individually?

9. Do you have sometimes such teaching problems when you need help, advice or instruction?

10. Is there any course or book that you would recommend to novice teachers?

III. Ending questions

1.Do you ask yourself: What else do I need to know? How will I find a resource to help me? How do you foster your teaching to satisfy theoretical and practical application of the knowledge?

2. Do you feel that you need to continue learning, and if so why? Or why not?

3. Think about the next stage of your career. Tell me what you think this will be like.

4. What comments or questions do you have for me? Is there anything you would like me to explain? What would you like to tell me that you've thought about during this interview?

The interviews were flexible, in regards of the order of a question for each interviewee. Additional questions were asked or some questions were omitted depending on the experience in the teaching field or already provided response. Follow-up interviews were conducted when it was necessary. The researcher wrote a memo after every qualifying interview to elicit more information from the next interviewee in order to get credible responses. The interviews lasted for about one hour. They were recorded or documented, and prepared as transcripts consequently.

Participant selection. The participants of this research were university professors working with undergraduate students. The initial purposive sampling criteria included professors who teach undergraduate students. Subsequent theoretical sampling was based on the qualitative criteria of saturation of the code categories, relevance to the emerging theory, and added variation of perspective (e.g., time experience of teaching; subject objectives; diversity of students). It was suggested that on the basis of the sampling criteria, there would be from 10 to 20 participants.

Identification and invitation. After final approval by the internal review board, the researcher recruited participants through meetings, phone calls and emails. During the initial conversation the researcher introduced the purpose of the study to the participants, explained the process of obtaining consent forms, and explored each person's interest in the project.

Data collection. To make findings objective, interview questions allowed the interviewees to talk about what they considered important. Initial questions were asking participants to share their teaching experience. To make participants focus on their experience, the statements of the researcher were clear, concise and sensible. In the process of data analyzing, there appeared new important questions. They intended to support objectiveness. As their stories unfolded, additional questions were asked about the resources that they could use for the improvement of their teaching skills. Final questions asked about their recommendations for creating tools supporting their search for the most appropriate methods to be used in various everyday teaching/learning situations. Interviews lasted from forty-five minutes to one hour.

Additional short interviews were requested in the form of a meeting, phone conversation or email. After processing the data, one more interview was conducted as a follow-up for the participants to receive a summary and share their insights on the analysis of the data. Thank-you follow up letters were sent to every participant. Interviews that were recorded with voice recorder application were downloaded in the Blackberry Z10.

Data analysis. The researcher located significant phenomena or experiences and labelled them. Qualitative studies call such labels codes. Next step was

to group primary codes into abstract codes to move the process of developing a theory. Thus interpretation occurred (Charmaz, 2006).

As mentioned earlier, open coding technique, or line-by-line coding, identified initial phenomena and captured what had been discussed. Oftentimes, the interviewee's own words were reproduced. These codes belong to the category of in vivo. The researcher kept to represent the interviewee's voice by grouping primary codes into the so-called "the most telling" (Gorra, 2004, p. 88) codes bringing them to the phase of focused or selective coding thus verifying if the initial concepts were adequately developed. Next coding phase was axial coding, defined by Strauss and Corbin as "the act of relating categories to subcategories along the lines of their properties and dimensions" (Strauss & Corbin, 1998, p. 123). This coding technique made existing categories deeper and better structured. Charmaz (2006) also advises to consider categories in the less formalized way to determine connection between them to understand interview data. Charmaz (2006) also argues that coding shapes the analytic frame and provides the skeleton for the analysis; coding becomes a connector both between collecting data and developing theory and between empirical reality and the researcher's view of it. The most abstract level of coding is theoretical coding, which explores the relationships that have been established between categories.

The expectation was that one category would appear in the data more frequently than others. If it was noticeably distinctive, this was a sign that this category summarized the events (for this study, the main event is teaching/learning relationship as a factor influencing baccalaureate retention). This category developed the theory; it is called central or core in the grounded theory.

The methodology bases on the evaluation of similarities and differences of the collected data. Findings lead to the conclusions that may constitute a new theory.

Artifacts. Glaser and Strauss (1967) consider other resources to be useful for the grounded theory research, for example, documents, literature or previous research. It should be noted that analysis of the gathered data was performed as advised by Creswell (2013) "on a conceptual level, with description kept secondary to concepts and analytic story" (p. 230). Results of the collected data were used to build a theory.

Instrument description. The study used materials used by professors in their daily lives - syllabi, videos, research articles on pedagogy etc. Such artifacts were supposed to foster understanding how professors teach students.

Participant selection. The participants of this research were university professors working with undergraduate students. The initial purposive sampling criteria included professors who teach undergraduate students. Subsequent theoretical sampling was based on the qualitative criteria (Denzin & Lincoln, 1998; Oktay, 2004) of saturation of the code categories, relevance to the emerging theory, and added variation of perspective (e.g., time experience of teaching; subject objectives; diversity of students).

Identification and invitation. After final approval by the internal review board, the researcher recruited participants through meetings, phone calls and emails. During the initial conversation the researcher introduced the purpose of the study to the participants, explained the process of obtaining consent forms, and explored each person's interest in the project.

Data collection. University professors shared and presented artifacts. There were created categories and subcategories of artifacts that were labeled for the purpose of finding them as soon as they were needed.

Data analysis. Data analysis of artifacts was processed in tandem with the interviews. The analysis involved coding as described above in this paper. After processing the data, a meeting was conducted as a follow-up for the participants to receive a summary and share their insights on the analysis of the data. Thank-you follow up letters were sent to every participant.

Data Analysis Procedures

The researcher gathered, verified, and analyzed the data systematically and continually until the theory emerged. According to Strauss and Corbin (1990), "One does not begin with a theory, then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge" (p. 23).

The initial sampling strategy was criterion-based selection, or purposeful sampling (Johnson & Christensen, 2012, p. 235). The information received from this population addressed the purpose of the research—to investigate how teaching methods of university professors contribute to student outcomes; to gain the views of professors on the available resources for professional development; and to identify a theory that describes how to apply teaching methods to increase beneficial educational outcomes for students.

The main method of data collection was theoretical sampling because it led to creating conclusions in the form of a theory and model. Glaser (1978) defines theoretical sampling as "the process of data collection for generating theory whereby the analyst

jointly collects, codes, and analyzes his data and decides which data to collect next and where to find them, in order to develop his theory as it emerges. This process of data collection is controlled by the emerging theory, whether substantive or formal" (p. 36). The described process included recurrent communication with the target population through interviews and artifacts. New participants entered the arena of the research. Thus the grounded theory concentration on constant generating of the data guided the process of data collection.

Stages of Data Collection

Grounded theory research was the process with multiple stages. The study started after the researcher completed a dissertation proposal, applied for the permission of the Institutional Review Board for Drexel University and the North Valley University, and the permissions were granted. The data were collected on the basis of theoretical sampling with its main technique of constant comparative analysis. According to the GTM, participants were chosen on the basis of the researcher's criteria and initial findings that constitutes the notion of theoretical sampling. Primary analysis of data defined issues for exploration; next stage developed a theory or a scheme. The process was iterative and took place in alternating sequences. This is known as a cycle of induction and deduction, consisting of collection of data and constant comparison between results and new findings in order to guide further data collections (Miles & Huberman, 1994; Strauss & Corbin, 1994). Identification of variables becomes part of the data collection process. The interviewee and the researcher work in concert as the interviewee initiates a concept, and further the researcher develops and conceptualizes it. Data were collected until theoretical saturation was reached, or until no new or relevant

data emerged regarding a category and relationships between categories were established (Strauss & Corbin, 1998).

The process started in June, 2016. It consisted of interviews and artifacts. After all categories stood in the slim position, the core category became visible. At that moment the researcher concluded that the data collection was complete and awarded proper definitions to the findings shaping the on-going data collection. Analysis followed as next stage. The process, on the whole, was featured as a cyclical process typical for the GTM. The researcher finalized the study by presenting the data and analysis to the participants as active members of the research and validators of the created theory.

Before presenting the dissertation for the defense, the researcher checked if the choice of the grounded theory methodology met criteria: credibility, originality, resonance, and usefulness. Charmaz (2006) concludes that a combination of credibility and originality enhances resonance and usefulness. Credibility is reached if there are strong links between gathered data and argument, data are sufficient to merit claims, categories offer a wide range of empirical observations, and the research provided enough evidence for the researcher's claims to allow the reader to form an independent assessment. Originality requirements are met if categories offer new insights, if the question about social and theoretical significance of the work is answered, and if there is evidence that the grounded theory research challenges, extends, and refines current ideas, concepts, and practices. Resonance criterion is met when there are positive answers to the questions whether categories portray fullness of the studied experience, the grounded theory makes sense to the participants, and analysis offers them deeper insights about

their lives and worlds. Grounded theory may be selected as a method if it brings usefulness to the research, in other words, if the analysis sparks further research in other substantive areas, the work contributes to knowledge, and the analysis offers interpretations that people can use in their everyday lives (Charmaz, 2006, p. 182). When the mentioned questions got positive answers, the dissertation was presented for consideration.

During all stages of the study, the researcher was using the technique of writing memos "as a way to facilitate reflection and analytic insight" (Maxwell, 2005, p. 12). It was used as a journal where facts were recorded, plans were made, and ideas were kept. Memos made the process of the research move in the logically designated direction because they served like a dialogue in the researcher's mind. It was important to document initial thoughts as they often sparked the best ideas. The researcher needed a memo as document for further development of the study. According to Saldana (2009), analytic memo writing has an "ongoing interrelationship" (p. 42) with the process of coding because as a linked component it is integrated in the development of an emerging theory.

The researcher stuck to the coding canon of the grounded theory by using methods of the First (In Vivo, Process, and Initial, or Open) and the Second (Focused, Axial, and Theoretical, or Selective) Cycles. Saldana (2009) advises, "Be prepared and willing to mix and match coding methods as you proceed with data analysis" (p. 76). In Vivo coding was important for this study as it was supposed to capture the behavior of the participants and possible resolution of the problem—how professors work with students and what they do to improve teaching/learning process.

Strauss (1987) assumes that In Vivo codes are likely to become "dimensions of categories" (p. 160). Process Coding was done together with Initial and Axial Codings. Process presented a picture of the events. Dey (1993) states, "Process refers to movement and change over time. In place of a static description, we can develop a more dynamic account of events" (p. 38). Process intended to observe what professors did when they encountered a teaching problem, what resources they referred to, and what they saw as a possible solution. Then the researcher used Initial Coding to compare the collected data. This method allowed "to remain open to all possible theoretical directions indicated by your readings of the data" (Charmaz, 2006, p. 46). Initial Coding seemed to be appropriate for this researcher for two reasons – first, the researcher was new to the field of the scientific study and coding; secondly, Initial Coding was used for a variety of data forms – this research utilized interviews and artifacts. Clarke (2005) insists that Initial Coding is especially helpful for coding artifacts data at the point of analyzing and interpreting them. It was expected that during this study, it would be possible to receive professors' videos, syllabi, articles etc. The analysis demonstrated how they reflected professors' intentions to make learning of their students successful. It also revealed gaps in the teaching/learning process. Saldana (2009) provides a succinct description of the Second Cycle Coding:

> Focused Coding categorizes coded data based on thematic or conceptual similarity. Axial Coding describes a category's properties and dimensions and explores how the categories and subcategories relate to each other. Theoretical Coding progresses toward discovering the central/core category that identifies the primary theme of the research. (p. 151)

These three types of coding served the main goal of this study – to reveal common themes and see how they correlate with each other, and what core category pertains to all

others, to create a theory or scheme that will be used by professors as the recommendation for improving the quality of their teaching methods. It seemed to be a new way to tie unknown pieces in the chain of the higher educational system in the United States. It was supposed to give answer to the question of high rates of undergraduate students' dropouts from universities and find ways to improve the quality of studies.

The repetitive and ceaseless character of the grounded theory stages is presented in Figure 2 below.

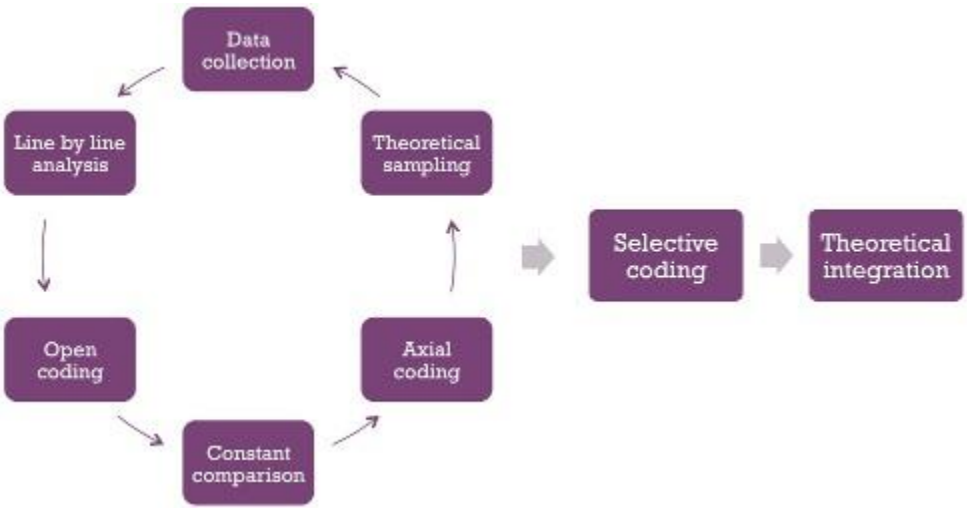

Figure 2. Grounded theory stages. This figure illustrates cycling character of the grounded theory stages. Adapted from "Uncovering steady advances for an extreme programming course" by Santos and Goldman (2012), *CLEIej vol.15 no.1.*

The following table presents this dissertation timeline defined by the researcher who builds her plan and strategy on the grounded theory stages.

Table 1 (continued)

Stages of Data Collection Timeline

IRB Approval	May, 2016	Received.
Organization for Housing Data	June, 2016	Organized.
Start field research	July, 2016	Started.
Complete field research	February, 2017	Completed
Data analysis (e.g., coding)	March, April 2017	Done.
Draft of Chapter 4	May, 2017	Done.
Draft of Chapter 5	June, 2017	Done.
Response and revision of 4 and 5 with SP	July, 2017	Done.
Completed dissertation draft to SP	August, 2017	Sent.

Revisions of dissertation – me and SP	August, 2017	Revised.
SP conferences with committee	August, 2017	Conferenced virtually.
Dissertation Orals ("defense")	September, 2017	Prepared.

Ethical Considerations

Ethical considerations of this study served the goal of conducting study in the appropriate way. The research did not impose a set of moralistic dictates on the research community like an attempt to prove that there were many professional gaps in teaching but looked for the way to solve emerged and emerging issues in the United States system of higher education. The research intended to make conclusions on the collected data taken from the experience and standpoints of the university professors.

Following recommendations of Diener and Crandell (1978), the researcher took into consideration three main ethical areas. First, the study showed relationship between society and science. This research intended to enrich a national data network by finding the best ways of teaching in the university because both society and science need active and strong professionals. Secondly, this research planned to be transparently professional with full exclusion of research misconduct. No fabrication, falsification, and plagiarism might exist. Strong belief was that personal bias or the data

received by other researchers could serve negatively in the ethical sense. Finally, the researcher saw main accent in the appropriate ethical treatment of research participants. Phillips (1994) warns that unethical behavior of the researcher can be revealed through the questions to the participants when their identity will become clear without naming them directly. So while conducting this study, every attempt was done to avoid their identification because, in most cases, people shared their opinions, which usually carry sensitivity, in a confidential way. It was the priority of the researcher to treat participants ethically, that is, keeping their privacy, confidentiality, and security. Though the educational research did not hurt participants physically, it might harm them emotionally. The research guaranteed participants that their identity would not become public, and they would know the results of the study before the study was published. The researcher asked the participants to provide the informed consent to express their agreement in the study. To begin with, the description of the study was revealed to them. The research was conducted exactly in the way described to the participants. Otherwise it might be easily converted into deception that was considered as unethical study. The participants were also acquainted with the rule that they could withdraw from the research the moment they decide so. The study data will be kept three years, and then, they will be destroyed. The data will be kept on the server not connected to the Internet. The last action was to submit a proposal to the Institutional Review Board (IRB) to determine whether this study was exempt from ethical oversight. It was stated by the researcher that the study was believed to fall into the exempt category. The IRB investigators determined that the researcher could proceed.

Chapter 4: Findings, Results, and Interpretations

The purpose of this study was to generate a theory that would explain influence of academics' pedagogies on the university students' engagement in learning. University students' engagement in learning in the higher educational establishments has become a concern of policymakers who stress the fact that the US is declining in student educational achievement compared with other countries. Half of the students do not complete the course and do not receive an undergraduate degree. The reasons are multiple. This research looked at the factor of academic support influencing retention and graduation. The central problem was that, given the growing demand for meaningful and relevant teaching in four-year universities, a description was needed of the pedagogies currently practiced by faculty members and how they consider reshaping those teaching methods to respond to student engagement challenges. The research created the model of teaching in higher educational institutions of the United States of America. This qualitative study examined best practices of university professors for transferring knowledge of the subject to students in the class and strategies used for student-centered teaching. The research explored the pedagogical methods used to effectively integrate knowledge, generate examples and explanations, arrive at creative solutions to problems; it collected and systemized resources for professional improvement of higher education instructors; and it observed the feedback and response of undergraduates as main stakeholders of the process.

The researcher outlined the following questions for the study:

(1) What teaching methods are the faculty members using to provide meaningful and relevant teaching for students?

(2) How do faculty members describe student responses to pedagogies that bring meaning and relevance to learning?

(3) What professional development resources do faculty believe would facilitate reshaping their pedagogy?

A grounded theory approach led to findings about pedagogy that is responsive to and creative of student engagement. Before presenting the findings, the researcher revisits Chapter Two to review the streams that guided the study: student-centered methods, student response, and professional development resources.

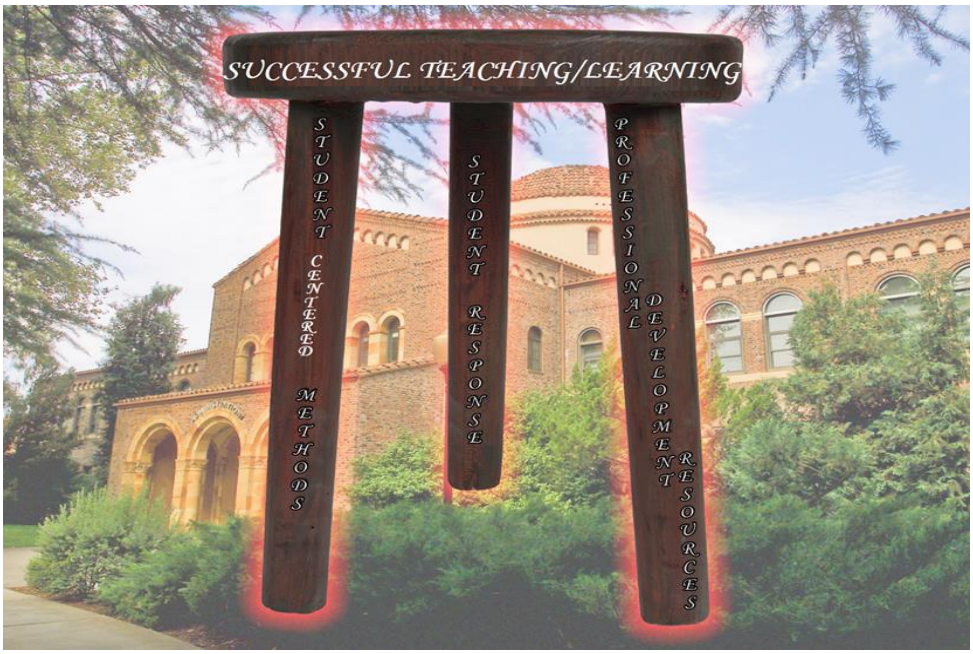

Figure 1. Successful teaching/learning model. This figure illustrates conceptual framework outlining the three research streams. Adapted from Drucker's idea of stability, balance, and integration in business.

The conceptual framework describes what teaching practice in the higher education facility consists of, how professors can share their experience of successful strategies, where they can find resources for their professional development, and how students respond to their teaching in the sense of academic results, satisfaction, and retention in the university.

Selection of the grounded theory method for this research was felt as appropriate because the emerged theory was grounded on the views and perspectives of the participants. It explored how professors work with students and what teaching resources they can use; it also generated comprehensive recommendations for their professional growth expressed via theory and scheme.

Findings

This research diagnosed what constitutes faculty-student collaboration demonstrated through relationship and interdependence between teaching and learning, and how it influences success, retention, and graduation of the undergraduate students. The investigator provided "an extension of current ideas" (Charmaz, 2006, p. 168) meaning that though similar studies like Biggs ' and Tang's exist, they have gaps in explaining why American students are not successful in the universities. Prosser stated in the preface, "One of its key strengths is that it is one of the very few books on teaching and learning in higher education that seriously addresses issues of student assessment in the context of the curriculum as a whole" (Biggs & Tang, 2011, p. 9).

The professors who were selected for the study brought ideas about ways to make undergraduate students successful by sharing their meaningful teaching methods, describing student responses to their pedagogies, and suggesting professional

development resources to facilitate reshaping their pedagogy. The findings were based on the interviews and the artifacts. The section of findings presents demographic description of the participants, analysis of the gathered data, and interpretation of findings into a grounded theory as it relates to the interdependence of teaching and learning in the university. The grounded theory method "is distinguished from others since it involves the researcher in data analysis while collecting data" (Charmaz, 2011, p. 202), it was performed accordingly.

Research Population

The population that was relevant to the problem of this research included university professors working with undergraduate students. The researcher included the North Valley University professors teaching sophomores and seniors because the literature proved that retention of students after the first year of studies is high, and the researcher considered more concentration in senior undergraduates because retention drops significantly during the second year and later.

The researcher recruited participants through meetings, phone calls and emails. During the initial conversation the researcher introduced the purpose of the study to the participants, explained the process of obtaining consent forms, and explored each person's interest in the project. The initial purposive sampling criteria included professors who teach undergraduate students. Subsequent theoretical sampling was based on the qualitative criteria of saturation of the code categories, relevance to the emerging theory, and added variation of perspective (e.g., time experience of teaching; subject objectives; diversity of students). The researcher suggested that on the basis of the sampling criteria, there should be from ten to twenty participants. Twelve professors who

were selected agreed to take part in this research, and were interviewed. All the professors were Doctors of Philosophy. All of them had experience of working with undergraduates. Deviancy was presented by comparing professors' points of view with different time in the career (from one year to more than twenty years) and selecting novices as well as more experienced university instructors. For the goal of getting acquainted with the pedagogical expertise in the subject, the professors were drawn from different departments. The researcher offered the participants to choose the convenient time and place of the interviews. The interviews were face-to-face by Skype and phone interviews. The interviews were of intensive character. An example of such an in-depth inquiry can be found in the interview questions (see Appendix A): one of the initial questions was "Can you share with me what is the formulation of your teaching philosophy?" After the professor shared his (her) philosophy, the next question was "Do you think your teaching philosophy makes you a better teacher? If so, why?" In this manner, the investigator received the answer about the teacher's goal in the process of working with students.

The researcher also used such method as collecting artifacts. Charmaz (2006) stated, "Although researchers often choose intensive interviewing as a single method, it complements other methods such as observations, surveys, and research participants' written accounts" (p. 28). An example of using an artifact is curriculum vitae of Professor Sweet stating that she was awarded the title Professor of the Year confirming that this teacher provided excellent knowledge to her students.

Cycling Process of Research Stages

The researcher gathered, verified, and analyzed the data systematically and continually until the theory emerged. According to Strauss and Corbin (1990), "One does not begin with a theory, then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge" (p. 23).

The initial sampling strategy was criterion-based selection, or purposeful sampling (Johnson & Christensen, 2012, p. 235). The information received from the population addressed the purpose of the research—to investigate how teaching methods of university professors contribute to student outcomes; to gain the views of professors on the available resources for professional development; and to identify a theory that describes how to apply teaching methods to increase beneficial educational outcomes for students.

The main method of data collection was theoretical sampling because it led to creating conclusions in the form of a theory and a model. Glaser (1978) defines theoretical sampling as "the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes his data and decides which data to collect next and where to find them, in order to develop his theory as it emerges. This process of data collection is controlled by the emerging theory" (p. 36). The described process included recurrent communication with the target population through interviews and artifacts. New participants entered the arena of the research. Thus the grounded theory concentration on constant generating of the data guided the process of data collection.

Grounded theory research was the process with multiple stages. During the first stage, the data were collected on the basis of theoretical sampling with its main technique

of constant comparative analysis. According to the GTM, participants were chosen on the basis of the researcher's criteria and initial findings that constitutes the notion of theoretical sampling. Primary analysis of data defined issues for exploration. Next stage developed a theory and a scheme. The process was iterative and took place in alternating sequences. This is known as a cycle of induction and deduction, consisting of collection of data and constant comparison between results and new findings in order to guide further data collections (Miles & Huberman, 1994; Strauss & Corbin, 1990).

Identification of variables becomes part of the data collection process. The interviewee and the researcher worked in concert as the interviewee initiated a concept, and further the researcher developed and conceptualized it. Data were collected until theoretical saturation was reached when no new or relevant data emerged regarding a category and relationships between categories were established (Strauss & Corbin, 1998).

The repetitive and ceaseless character of the grounded theory stages is presented in Figure 2 below.

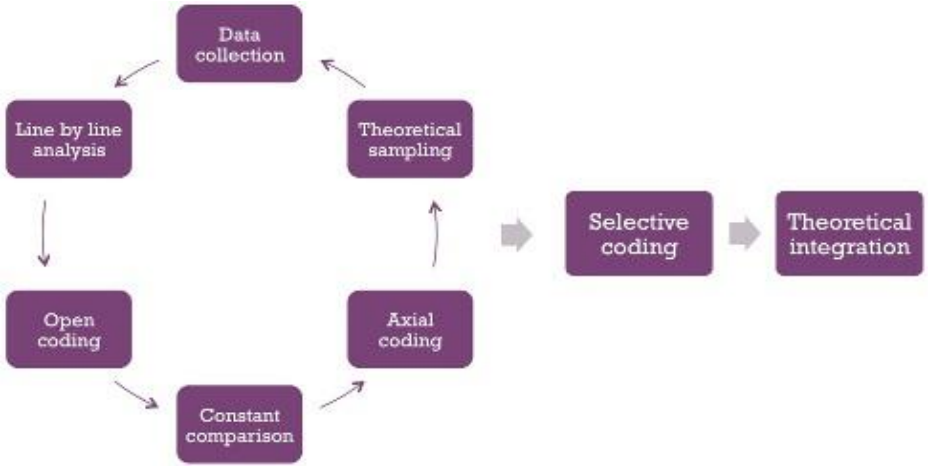

Figure 2. Grounded theory stages. Adapted from "Uncovering steady advances for an extreme programming course" by Santos and Goldman, 2012, *CLEIej vol.15 no.1.*

The process started in June, 2016. It consisted of interviews and artifacts. After all categories had been shaped, the core category became visible. At that moment the researcher concluded that the data collection was complete and awarded proper definitions to the findings shaping the on-going data collection.

Analysis followed every stage of collection. The process, on the whole, was featured as a cyclical process typical for the GTM. Collection of data and simultaneous analysis of them had three stages: 1) this stage included first four participants; the researcher performed data collection, line by line coding, open coding, axial coding, theoretical sampling; comparison followed; 2) another set of four participants was interviewed; the cycle repeated but included more detailed or additional questions on the interview; comparison followed again; 3) the researcher selected four new participants to see if the pattern was constant; after the eleventh interview, the researcher understood that the saturation was reached because, with new data, the emerging theory could not be changed anymore; the twelfth interview made it evident.

The researcher finalized the study by presenting the data and analysis to the participants as active members of the research and validators of the created theory. Before presenting the dissertation for the defense, the researcher checked if the choice of the grounded theory methodology met criteria: credibility, originality, resonance, and usefulness. Credibility is reached if there are strong links between gathered data and argument, data are sufficient to merit claims, categories offer a wide range of empirical observations, and the research provided enough evidence for the researcher's claims to

allow the reader to form an independent assessment. This researcher "achieved intimate familiarity with the setting or topic" (Charmaz, 2011) by understanding that there is a direct connection of teaching with learning. The researcher found answer to the stated questions about teaching methods used by academics in the university, their resources, and student responses to their pedagogy. The systematic comparisons between data and categories were performed at every stage and between stages of the data collection. Categories covered "a wide range of empirical observations" (Charmaz, 2011) starting with the academic competence of every professor and ending by the students' proficiency. The researcher felt "strong logical links between the gathered data and argument" (Charmaz, 2011). For example, out of the twelve interviewees, only two professors had American pedagogical education in teaching students; two professors had the same education received abroad; other eight professors were never educated how to teach students in the university, and when they faced a teaching problem, they could rely only on their experience or consult colleagues. The investigator claims that teaching education is mandatory for academics working with students.

Originality requirements are met if categories offer new insights, if the question about social and theoretical significance of the work is answered, and if there is evidence that the grounded theory research challenges, extends, and refines current ideas, concepts, and practices. In this paper, there are such fresh categories as high performance, which is one of the constituents to consider that the teacher is awesome, or imagination when a student imagines that he knows how to solve a problem, and others. These categories offer new insights on becoming a perfect teacher and how to grow a star student. The suggested theory provides extension to the known theories and refines

current ideas by stating that teaching/learning relationship is a strong factor to support students in retaining in school and graduation. Literature proved that focus of the schools and regulators is on strengthening the relationship between students, departments, and academic advisors but they do not enlighten how faculty are going to solve the problem during actual classroom sessions. Secondly, research demonstrated that retention rates of students is very high after the first year of studies but it decreases dramatically starting during the sophomore year. It was necessary to study what affects students' achievement later in the course of studies. While the National Commission on Higher Education Attainment plans to conduct significant studies in college attainment by 2020, this research contributes to the answer. The research may become significant and valuable because it adds to the understanding of the relationship between professors' student centered teaching student engagement and outcomes. It reveals pedagogical strategies that positively impact student learning.

Resonance criterion is met when there are positive answers to the questions whether categories portray fullness of the studied experience, the grounded theory makes sense to the participants, and analysis offers them deeper insights about their lives and worlds. In the range of this study, the defined categories portrayed the fullness of the studies experience (Charmaz, 2011) by the emerged opportunity to construct a scheme of teaching in which a qualified professor would be able to grow a star student. This study revealed both liminal meaning and unstable taken-for-granted meaning in several cases, for example, every professor in the university is supposed to do both, research and teaching. Professors occur between types of practice. This is taken for granted. But the state is liminal because not every researcher can automatically become a

pedagogue. Sometimes it is possible but not every time, which is instability. These findings make sense to the participants because they complain of lack of resources. The analysis in this paper will offer them deeper insights about their profession (Charrmaz, 2011).

Grounded theory may be selected as a method if it brings usefulness to the research, in other words, if the analysis sparks further research in other substantive areas, the work contributes to knowledge, and the analysis offers interpretations that people can use in their everyday lives ((Charmaz, 2006, p. 182). This study did not only observe the life and experience of the university professors but also offered interpretations in the form of the Uniform Excellence Theory and its scheme that may be used in the professional life of the professors. Though this study investigated how professors teach undergraduates, it can become generic and ready to be applied in similar circumstances, for example, for teaching graduates but a new study specifying those peculiarities should be conducted. On the whole, the results of the study contribute to changing the current world of higher education in the United States to improve the system because the community needs highly qualified and knowledgeable specialists, and it is only the university that can help reach the goal. When the questions about credibility, originality, resonance, and usefulness got positive answers, the dissertation was presented for consideration.

Writing Memos. During all stages of the study, the researcher was using the technique of writing memos "as a way to facilitate reflection and analytic insight" (Maxwell, 2005, p. 12). It was used as a journal where facts were recorded, plans were made, and ideas were kept. Memos made the process of the research move in the

logically designated direction because they served like a dialogue in the researcher's mind. It was important to document initial thoughts as they often sparked the best ideas. The researcher needed a memo as document for further development of the study. According to Saldana (2009), analytic memo writing has an "ongoing interrelationship" (p. 42) with the process of coding because as a linked component it is integrated in the development of an emerging theory. An example of memo is the following. During the first set of interviews, professors stressed the first condition to be admitted as a teacher – to know the target subject perfectly well. The investigator wrote in her memo, "Agree that a professor should know the subject perfectly well, which is condition number one to start teaching. So what? But do they know how to teach their subjects?" This memo was a dialogue in the investigator's mind, it was basis and idea for the further plan of the study.

Taking Notes. The researcher was taking notes following her comparisons. It was one more method of data collection and simultaneous analysis, which helped understand realia and interpret them. Here is an example of a note written after the second set of interviews:

> I look at the professor in development speaking about the main activities of teaching and research. In Chapter I, I had a three-legged stool, which showed stability and strength of teaching but now I see that this is a good reflection of only three parts of successful teaching. For me, at this point, it seems that a stool like it was shown in Chapter 1 is a limited reflection of the idea because constituents are more than three and can increase in the future. Besides, the model of the stool, even with four legs, does not reflect the process. I intend to show the process, its development and space for the improvement. Graphically, I can present this idea as a picture of a curved bench. It shows stability, can be added and amended, and does not have an end as there is no end to perfection.

The researcher's note was accompanied by the illustration "Three-legged stool vs curved bench:"

Figure 3. Three-legged stool vs curved bench. This figure illustrates transformation of conceptual framework understanding. Adapted from Drucker's idea of stability, balance, and integration in business, and

Coding. The researcher stuck to the coding canon of the grounded theory by using methods of the First (In Vivo, Process, and Initial, or Open) and the Second (Focused, Axial, and Theoretical, or Selective) Cycles. Saldana (2009) advises, "Be prepared and willing to mix and match coding methods as you proceed with data analysis" (p. 76). In Vivo coding comprising 450 codes was important for this study as it was supposed to capture the behavior of the participants and possible resolution of the problem – how professors work with students and what they do to improve

teaching/learning process. Strauss (1987) assumes that In Vivo codes are likely to become "dimensions of categories" (p. 160). Process Coding consisting of 180 codes expressed by the gerund form was done together with Initial and Axial Codings. Process presented a picture of the events. Dey (1993) states, "Process refers to movement and change over time. In place of a static description, we can develop a more dynamic account of events" (p. 38). Process intended to observe what professors did when they encountered a teaching problem, what resources they referred to, and what they saw as a possible solution. Then the researcher used Initial Coding to compare the collected data. This method allowed "to remain open to all possible theoretical directions indicated by your readings of the data" (Charmaz, 2006, p. 46). Initial Coding occurred to be appropriate for this researcher for two reasons: first, the researcher was new to the field of the scientific study and coding; secondly, Initial Coding was used for a variety of data forms—this research utilized interviews and artifacts. Clarke (2005) insists that Initial Coding is especially helpful for coding artifacts data at the point of analyzing and interpreting them. During this study, it became possible to receive professors' videos, syllabi, articles etc. The analysis demonstrated how they reflected professors' intentions to make learning of their students successful. It also revealed gaps in the teaching/learning process.

Saldana (2009) provides a succinct description of the Second Cycle Coding:

> Focused Coding categorizes coded data based on thematic or conceptual similarity. Axial Coding describes a category's properties and dimensions and explores how the categories and subcategories relate to each other. Theoretical Coding progresses toward discovering the central/core category that identifies the primary theme of the research. (p. 151)

These three types of coding following one another in succession served the main goal of this study—to reveal common themes and see how they correlate with each other, and what core category pertains to all others, to create a theory or scheme that will be used by professors as the recommendation for improving the quality of their teaching methods. It was a way to tie unknown pieces in the chain of the higher educational system in the United States. It gave one of the answers to the question of high rates of undergraduate students' dropouts from universities and found a system for improving the quality of studies.

Conceptualizing. Systemizing codes led to understanding what codes were the most frequent and could be used or synthesized into the emerged concepts, and at the next stage, categorized "incisively and completely" (Charmaz, 2011, p. 73). The researcher decided to base her coded data on the university teacher competence model created by Blašková et al. (2014) in Slovakia, according to the standards of the European higher education teaching. Initially, the coded data were observed to be random because they did not fit into the system competencies. Revisiting Literature Review Chapter, the academic competences model by Blašková et al. (2014) represents a system of competences of the key professional skills, personal talents, and behavioral patterns of a university professor: professional, educational, motivational, communicational, personal, science and research, and publication competences. The table below illustrates main competences:

Table 2

Academic Competences

	ACADEMIC COMPETENCES
1	professional
2	educational
3	motivational
4	communicational
5	personal
6	science and research
7	publication

Combination of the emerged focused codes and the university teacher system of competences allowed to understand what affects student success and retention in the university. Below the reader finds definitions from the aforementioned system of competences by Blašková et al. (2014) and the elements representing the notions, which came forth during the process of data collection, interviews and artifacts.

Professional competence. Blašková et al. (2014) define the professor who has high level of professional competence as:

> a qualified and recognized specialist in the field of his/her teaching and research; has excellent professional skills and competences; rightly serves as a proficient expert, able to combine theoretical knowledge with practical knowledge and experience; he/she masters and knows how to apply the principles, methods, benefits as well as restrictions of all professional terms, elements and the links between them.

The following elements emerged in the study: successful career, content knowledgeability, combining theoretical knowledge with practical experience, application of teaching principles, qualification, proficient expertise, variety of methods, skills in using methods, reshaping methods, teaching technique, resources, effective teaching versus "bad" teaching, relationship between teaching and learning, and retention. The table below illustrates elements of professional competence:

Table 3

Professional Competence

	PROFESSIONAL COMPETENCE
1	successful career
2	content knowledgeability
3	combining theoretical knowledge with practical experience
4	application of teaching principles
5	qualification
6	proficient expertise
7	variety of methods
8	skills in using methods
9	reshaping methods
10	teaching technique
11	resources
12	effective teaching versus “bad” teaching
13	retention
14	relationship between teaching and learning

The North Valley professors recognize that the majority of students join the university to prepare themselves for a future career. But the most experienced professors understand like Dr. Wise that teaching contributes to student success. All professors are unanimous in considering knowledgeability of subject content by an instructor as requirement number one. Secondly, a professor, according to the study, has to have pedagogical strategies that positively influence learning process. The data describing what methods university professors use are genuinely rich: Socratic (or critical thinking), experiential, problem posing, blending and others. Dr. Cool names her method "pushing thinking", which actually reflects the process of teaching/learning. Other teachers join the opinion that though using any specific method is necessary, it is not a must to stick to one method. Dr. Nobel explains this attitude, "I use a variety of teaching methods, each of which can be tailored to the needs of students at the moment (e.g. during an activity) or modified over the course of a semester as needed." According to Dr. Cool, teaching has its goal to transfer such skills to the students that would help them to "defend their opinion." The mentioned methods include a variety of classroom and out of classroom activities. For example, Dr. Great uses a whole group lecture, discussion about readings, video, and a small group work. Professor Great is confident that "incorporating a variety of learning activities within and outside of the classroom promotes student engagement and ensures that each student is supported."

Most professors reshape their methods when they notice that the methods do not work effectively. But they do it when the method is not productive for the majority of the students in the group. If the method does not work for one student, the professors prefer working with a student individually by consulting in the office, giving an individual

assignment in class or online through the university blackboard. This gives a chance for a professor "to meet students where they are and to bridge the gap" (Dr. Wise). Dr. Cool includes engagement of ALL students in the notion of the individual approach. But the data find an issue with this. Recently many university administrations increased number of students in a class which may be explained by lack of sufficient finances. Professors observe decrease of quality in teaching/learning as it makes more difficult to work with a student individually.

To serve students better, professors create effective teaching techniques—techniques that accommodate student needs and lead to student success. All the interviewed teachers emphasized the fact that they never lecture in the sense of a traditional lecturing. They include in the explanation of a new material such techniques as inquiring, games, simulation etc. They also provide students with lecture notes, handouts, online announcements and reminders. Dr. Cool says that her lecture "is not a pure lecture but the class when they [students] can integrate their knowledge."

Professors need multiple resources to be successful educators. To help themselves move through the content or pedagogical issues, they turn to colleagues for advice, find answers in the literature, or create resources themselves.

Critical for success is teacher-student relationship created by fostering knowledge, skills, and dispositions that serve students not only within the current semester, but extend beyond the university. Teachers share their experience about incorporation of supportive and respectful relationships, interactive learning environment, and encouragement of students to take appropriate responsibility for their engagement into the teaching/learning process. They admit that both, students' attitude and diligence of

professors' skills, are inseparable, and one without the other decreases the quality of the learning experience.

Teachers in the university have to understand that diversity of students makes difference in the attitudes because of variety of backgrounds and cultures. Professor Sweet provides a clear example of this. Out of her 45 students in class, the majority of students who were foreign told her that it was her success as a professor when they received good grades. But others who were from the U.S. told her that the grades were their own achievements. This example shows that a teacher should think every time what approach to choose to interact with students.

Finding appropriate approaches, methods, and teaching techniques leads to improving retention issues. Dr. New is sure that "a professor influences retention of undergraduates." Occasionally, professors are not diligent but students do not leave a program because of just one bad instructor if others in the program are perceived as better quality, according to the interviewees' observations.

Educational competence. Blašková et al. (2014) define the professor who has high level of educational competence as:

> an excellent teacher; can define the key terms and elements of any topic and explain them to students understandably; uses and greatly combines various educational methods and elements, always with regard to the topic that he/she teaches; uses both formative and summative evaluation of knowledge, skills and competences of students, and always maintains objectiveness and impartiality towards any student.

The following elements appeared in the study: full pedagogical education, short pedagogical education, partial pedagogical education, continuing pedagogical education, lack of pedagogical education, self-education by experience, resources for self-education, learning from colleagues, learning from a mentor, and

relationship between teaching and learning. The table below illustrates elements of educational competence:

Table 4

Educational Competence

	EDUCATIONAL COMPETENCE
1	full pedagogical education
2	short pedagogical education
3	partial pedagogical education
4	continuing pedagogical education
5	lack of pedagogical education
6	self-education by experience
7	resources for self-education
8	learning from colleagues
9	learning from a mentor
10	relationship between teaching and learning

The data revealed in the interviews describe what pedagogical education prepared professors to teach in the North Valley University. Two of the twelve interviewees received regular full teaching education. Two professors were educated abroad before they had immigrated to the United States. Other eight professors received short course of preparation in various academic centers created for supporting university professors, or were educated by mentors, experienced and successful teachers, or just by family members who had some pedagogical expertise, or lastly, had a lack of any education.

In cases when professors lacked pedagogical education but received training from mentors, experienced teachers or teaching centers, the outcomes were different. Dr. Great feels lucky, "My mentor used the TA (Teacher Assistant) format to purposefully train me to be a good teacher." In his turn, Dr. Nobel states that in the teaching center "the staff have little experience and express inability to work with professors individually." All the interviewees demonstrate desire to self-educate or continue learning of how to teach university undergraduates. Dr. Bright suggests:

> I think that good teachers never stop being good students. I was all of these and a "perpetual student," not only of pedagogy but also of elements of the discipline. I would like to continue learning about learning theory and also to help convey that information and examples of teaching pedagogy to less experienced faculty.

Professors draw attention to the problem regarding lack of pedagogical resources. Professors attempted to give advice on finding resources, "Always valuable to talk and share with others. Sometimes someone has a valuable pedagogical technique that is invaluable" (Dr. Bright). "I encourage novice instructors find discipline-based teaching and learning resources as well as a more broad resources related to learning and

motivation research to help them understand the learning process so that they can better prepare their teaching methodologies" (Dr. Nobel).

Motivational competence. Blašková et al. (2014) define the professor who has high level of motivational competence as a person who:

> motivates others through each of his/her action, every lecture or seminar; sees motivation as the key element of any process, work, effort or relationship; respects the dynamics of the motivation of individuals (students, colleagues) as well as groups (study groups, departments); identifies and strictly eliminates any demonstrations of his/her as well as someone else's unethical, dishonest and demotivational behaviour; has the self-motivating and self-keeping ability and the ability to surmount obstacles, to draw and deliver energy in a beneficial manner.

The following elements came to light in the study: respect for the group dynamics, interest, encouragement versus annoyance, teacher's self-motivation, and relationship between teaching and learning. The table below illustrates elements of motivational competence:

Table 5 (continued)

Motivational Competence

	MOTIVATIONAL COMPETENCE
1	respect for the group dynamics
2	interest
3	encouragement versus annoyance
4	teacher's self-motivation

5	relationship between teaching and learning

Professors unanimously agree that motivating a student is one of the constituents of the pedagogy. Several professors note that students come to the university because they have a general motivation for getting education received by their experience, family life, and plans for the future. But that is not enough to stay on their dreams because college has its requirements.

To succeed, students need additional motivation, which is provided in school, especially, by educators. Dr. Grand is confident that if students arrive at school, they are already motivated and interested. Dr. Wise disagrees saying that students' interest is caused by their engagement in the study process, and only when students are truly interested the desire to learn more appears, and students become successful, "participation equals achievement." She admits that there is a problem with motivating in class all students simultaneously because students are of different background and culture, preparedness and age, these combined with other factors. She recommends to start "with something in which they are genuinely interested."

Dr. Great as an experienced educator knows that nothing is always interesting to students. There will always be some classes that no matter how skilled the professor don't appeal to a particular student, which will require good attitude and diligence on the part of the student no matter what the professor does. On the other hand, poor instruction/ lack of concern on the part of a professor can discourage the most diligent student.

Understanding the process of education in the university makes motivational skills of a professor even more significant.

Communicational competence. Blašková et al. (2014) define the professor who has high level of communicational competence as a person who:

> has great communication skills, notably assertiveness, empathy, active listening, persuasion and metacommunication; appropriately combines those communication skills and uses them in his/her educational activities; prevents communication misunderstandings (with students and colleagues alike); his/her written as well as spoken language is always distinguished and fair; he/she sees and uses communication as an instrument to build trust.

The following elements materialized in the study: interaction, communicating content, persuasion, reflection, environment, empathy, and relationship between teaching and learning. The table below illustrates elements of communicational competence:

Table 6 (continued)

Communicational Competence

	COMMUNICATIONAL COMPETENCE
1	interaction
2	communicating content
3	persuasion
4	reflection

5	environment
6	empathy
7	relationship between teaching and learning

Dr. Wise stresses the importance of professional interaction between a professor and a student, "Interactions may be of benefit because, in this way, an instructor and a student support each other." Every interview contains the phrase "care about a student" in different contexts – study, family, attitude etc. The North Valley professors find powerful force in the talent of effective communicating with students. They share examples of how proper and improper communication influences student learning. Dr. Bright demonstrates clear understanding of the possible issues:

> A teacher must assume that his/her students want to learn. Also, they want to get good grades. Unfortunately, all too often, the students have been told they are not good—and, double unfortunately—they believe it. They come into the class with this stigma tattooed on their foreheads. One of the tasks of a good teacher to convince them otherwise.

The instructor is very much responsible for creating an environment in which all students can succeed, including guiding them in developing good study habits, responsibility, etc. Dr. Nobel sees teachers' goal in the following, "We're not just there to communicate content, but to help them develop as successful learners." Sometimes a simple meeting leads to improving learning/teaching atmosphere. As a matter of fact, creating a good class atmosphere, even if it is emotional, is beneficial (Dr. Sweet). More

than sufficient knowledge is necessary to create favorable atmosphere, or they also use such terms as "classroom climate" and "learning environment." To create stimulating and safe atmosphere where students become active participants in their learning and growth, Dr. Great has this strategy, "To foster this climate within my classroom, I must be sensitive to individual student differences and ensure that students understand the goals and objectives of the class and the steps required to meet those goals." Dr. Wise says that it is important for a teacher to reflect on the previous courses, in order to provide new approaches to communication with students.

Personal competence. Blašková et al. (2014) define the professor who has high level of personal competence as:

> a mature, highly creative, inventive, resourceful and courageous personality; is always tolerant, empathic, accommodating and helpful to others (students and colleagues alike); sees his/her mission as the accomplishment of his/her personal qualities, and permanently strives to cultivate them; educates students and colleagues in close participation with them, respecting and developing their personalities.

The following elements turned up in the study: responsibility, quality, inventiveness, creativity, respect versus disrespect, and relationship between teaching and learning. The table below illustrates elements of personal competence:

Table 7

Personal Competence

	PERSONAL COMPETENCE
1	responsibility
2	quality
3	inventiveness
4	creativity
5	respect versus disrespect
6	relationship between teaching and learning

All professors in the interviews agreed on the fact that the main figure in the teaching/learning process is a student because it is a student who comes to the university to be educated. Professors with longer experience notice that a student changes as a new generation carries its specific attributes. A mature teacher such as Dr. Great who speaks about quality of teaching and a student outcome understands, "My students are from a different generation and often different cultural background from me—so I need to continue to learn about them." A teacher needs to be inventive to accommodate students. Dr. Bright as an experienced instructor observed many teachers,

> Two people can teach the same material. One is brilliant, one is lifeless—and all of the stages between. So what makes a difference? The methodology and/or the means you employ to teach that material. And so much of that involves your own

> personality. I tell students that you don't change who you are when you walk into a classroom.

Professors in this study touched on the question of their responsibility for the quality of teaching and grades. Though some of them feel that the quality of teaching and quality of learning are interdependent, and they have to be responsible for students' learning outcome, others are confident that the responsibility for grades earned ultimately lies with the students because often students have unrealistic expectations about grades. In general, findings show that all professors are open to students' ratings and ready to adjust their methods and teaching technique.

Science and research competence. Blašková et al. (2014) define the professor who has high level of professional competence as:

> a zealous, responsible, relentless, resourceful and highly competent scientist and researcher, either at the level of a cooperating solver or an owner/guarantor of scientific projects; his/her scientific efforts and creative research contribute to knowledge development; he/she reveals and subsequently provides others with knowledge and outputs that are always up-to-date, true, useful and inspirational; sees science and research as the driver and concurrently as the inevitable determinant of good higher education and of the progress of society; refines his/her competence in carrying out valuable scientific research in his/her scientific field.

The following elements were revealed in the study: subject competence, knowledge development, progress of society, providing knowledge to students, incorporating research in teaching, and relationship between teaching and learning. The table below illustrates elements of science and research competence:

Table 8

Science and Research Competence

	SCIENCE AND RESEARCH COMPETENCE
1	subject competence
2	knowledge development
3	progress of society
4	providing knowledge to students
5	incorporating research in teaching
6	relationship between teaching and learning

University academics participate both in research and teaching. The data demonstrated connection of research activities with engagement of students and collaborative learning. Dr. Great shares that she encourages students to work with her on the research. Professors state that using research results as proof of theory is one of the ways to show students that any opinion has to have arguments. Student engagement is not for engagement and entertainment but for connecting theory and practice, developing critical thinking, and the ability to defend personal point of view. Such attitude leads to the ability of solving problems. Dr. Wise is sure that "scholarly evidence is the basis of an argument." Practically, all interviewees integrate teaching and scholarship by

involving students in research and incorporating their research within classes. Dr. Sweet admitted that collaborating with students does not bring up critical thinking only in students but also in professors. During the interviews professors discussed the question of what is more important for the university—research or teaching. Dr. Great compares new students with the blind men from the parable about blind men and the elephant. Students arrive in school with the knowledge of only one side or small part of a subject who can see a big picture only after thorough studies, learning theory, conducting experiments, practicing, and suggesting problems decision.

Publication competence. Blašková et al. (2014) define the professor who has high level of publication competence as a person who

> publishes his/her outputs (publications) in such quality, periodicity and originality that these do the author valuable credit, being of high scientific, social and educational significance (both local-language and foreign-language monographs; higher education textbooks drawing from national as well as international authors; articles in domestic and foreign journals and at scientific conferences); as an author, he/she always maintains absolute fairness and high quotation discipline.

The following elements emerged in the study: originality, significance, variety, student involvement, and relationship between teaching and learning. The table below illustrates elements of publication competence:

Table 9

Publication Competence

	PUBLICATION COMPETENCE
1	originality
2	significance
3	variety
4	student involvement
5	relationship between teaching and learning

Publications, books and articles, are original; they are of high significance both for the scientific audience and for the local communities; among the interviewed professors there are academics known globally. The format of this paper does not allow to present exact examples on this matter. But what artifacts prove is that the publications are of two main types: works in the expertise area and articles on the pedagogical strategy. For examples, some of the interviewed professors recommend changes in their fields that could improve life conditions in California. Dr. Smart addresses pedagogical strategy in teaching Science. Dr. New published an article on the use of conferences as teaching resources. One more element is that the publications are not in vacuum. To crown the conceptualizing stage of the study, the concepts that were

revealed with the help of the competences model have been shown in the tables above. The comprehensive chart of competences is below:

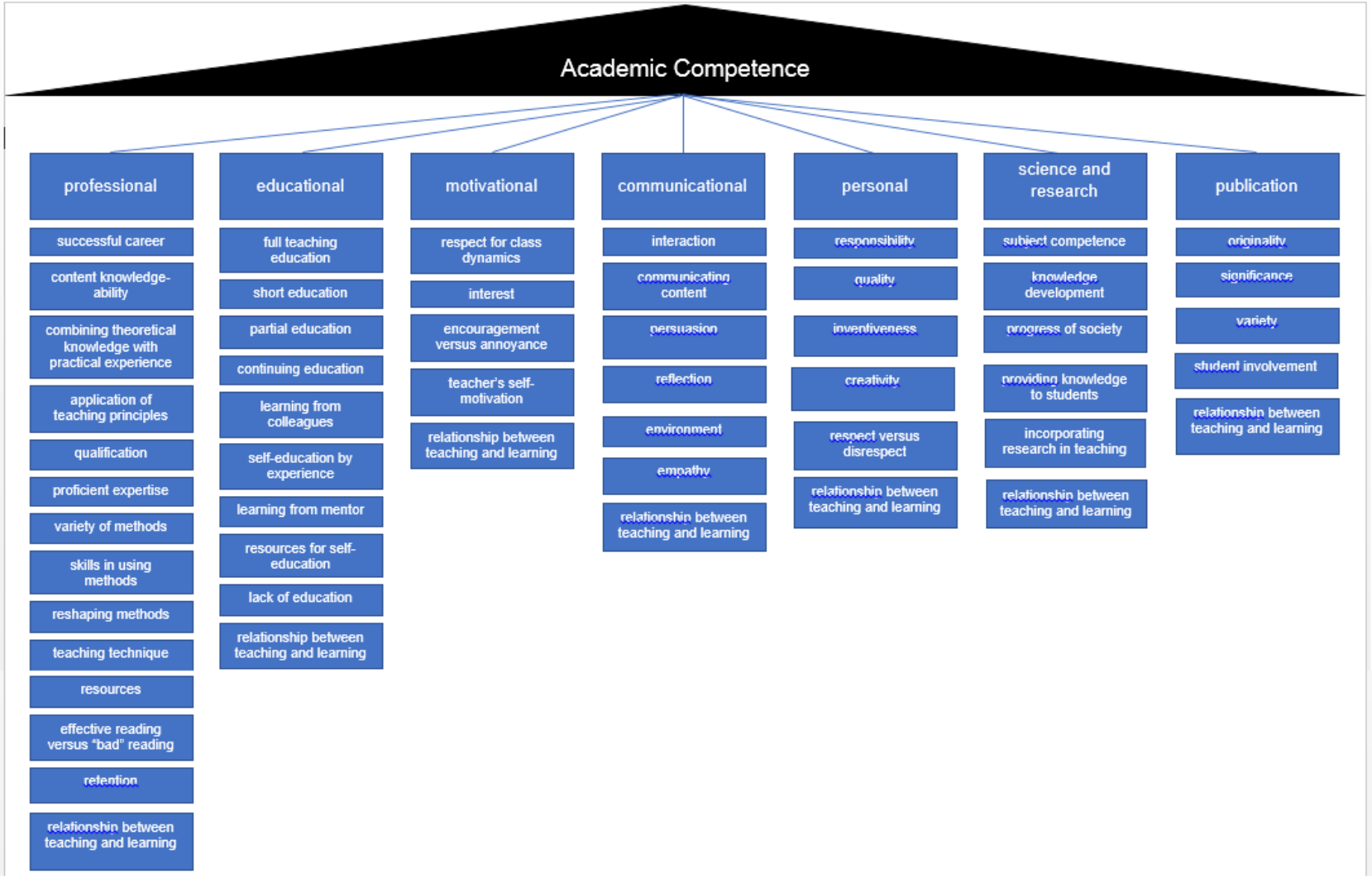

Figure 4. Comprehensive chart of academic competences. This figure illustrates academic competences with the elements revealed in this study.

Grounded Theory Presentation

The purpose of this study to generate a theory is reached. The researcher suggests saturation of theoretical categories complete. Grounded theory explaining the influence of academics' pedagogies on the university students' engagement in learning is generated from codes and categories. The emerged theory explains what methods university professors use to grow successful students, how students respond to their pedagogies, and what resources help professors to become and stay successful.

Generating Concepts into Theoretical Categories. Determination of concepts leads to the opportunity of analyzing how teaching in the university affects success or failure of the students. Charmaz (2011) stated, "In a sense, our concepts become 'actors' who create the analysis of actions in the scene" (p. 151). Professors in their interviews described the process of teaching. They presented many examples of situations, in which they were or were not able to impart the knowledge of their subjects to the students. Their experiences were employed to unveil major themes. For example, all professors answered the interview question whether they identify themselves more of being a researcher or a teacher. The investigator qualified response of Dr. Great as the one that shows relationship between concepts, professional and research competences, which would lead in the future to defining what a successful teacher is**:**

> I am a teacher/ mentor. My role requires that I provide students with the knowledge base required to be a [specialist] but also to model/ teach the dispositions required to be an ethical and effective practitioner. I am also a researcher, but I see my research role as very strongly related to my former practitioner experience and my current teaching/ training role. Sometimes it feels like more—I will joke with students that I am "raising baby [specialists] (Dr. Great).

Axial Coding exploring relationship between categories leads to understanding that the defined categories describe what features are necessary for teaching effectively, or being a successful professor, or growing successful students. Analysis of the collected data concluded that teacher's profession requires availability of the definite features combined into the category of "academic competence." The analysis proved that many elements are related as in the example above. Before conducting a research, the investigator asked about those qualifications of a modern university professor that will make possible crafting a successful student who will enter a career with meaningful knowledge and skills. Academic competences (professional, educational, motivational, communicational, personal, research, and publication) occurred to demonstrate real picture of the teaching/learning process. While the participants shared their experiences, main themes emerged. Their appearance was caused by comparing concepts, for example, excellent teaching and so-called "bad" teaching. All the interviewed professors argued that if a professor wants to grow a successful specialist the professor himself/herself should be successful. Dr. Wise being an expert determines the notion of a successful teacher, "My definition of a successful teacher is the ability to combine knowledge of the subject and the ability to teach students of different levels. A successful teacher should be an interesting teacher." A successful teacher feels the responsibility to create an environment of success, "I'm there for the students, not for myself. If they don't get something, it's my task to mold that subject so that they are successful" (Dr. Wise). According to Dr. Wise, sometimes she meets professors who "are less concerned about whether or not students understood them." She calls this phenomenon "bad" teaching. Dr. Wise, along with others, monitors how

students respond to teachers' attitudes, methods, care etc. They notice that when students are satisfied with the imparted knowledge and skills, get good or excellent grades, and are eager to be engaged in the class activities or research, in the ratings they call professors awesome, great and outstanding teachers. In cases when students are not satisfied, they show no interest in studies, become passive or even express arrogance, and the rating comments carry negative features. Based on the study, professors utilize many teaching methods, adjust them to the needs of students, and readily reshape them to meet the requirements of the program.

In the majority of cases, appropriate selection of a method provides a positive outcome though there are tough situations when an issue arises. A caring professor looks for help. Though professors demonstrated the ability to turn to their colleagues, use assistance of learning centers, attempted to find books or manuals, they failed because the resources are very limited. When asked if there is any course or book that they could recommend to novice teachers, the routine answer in the interview was "No, not really" or "Tough question."

Those professors who never received regular pedagogic education or were trained in a short course made it a point that lack of education is an obstacle to be proficient in finding resources. Dr. Clever admits that his education included "quite a few informal workshops." The education was "uneven" in several cases. Dr. Clever complains that he was taught how to teach but there was no teaching of "what to teach." In her turn, Dr. Sweet who received only course of training complains that though she knows what to teach, she lacks education of how to teach, "don't feel my pedagogical training prepared me to teach to less prepared or interested students." Dr. Wise warns

about such situations because there is a threat of students not grasping the content of the subject. Even experienced and known educators like Dr. Wise face challengeable teaching situations that they explain by lack of education:

> My personal philosophy about education is that I can never honestly control when a student is ready to learn something, and I can't really control what a student actually does with what he may do with the information they take from my class.

Professors noted that effective teaching happens when students are motivated. Reasons for motivation are multiple. A university frequently suggests that motivation should be provided by a program adviser and speaks less about the significance of faculty in this matter. Dr. Bright expresses his vision of the situation:

> I think self-evaluation is extremely important. What did I wish to achieve in this particular lesson? Did I succeed? Why or why not? There's nothing worse, in my opinion that a teacher who teaches exactly the same lesson class after class.

Communicational competence is difficult to reach because, as teachers state, students have various backgrounds and originate from a variety of cultures. Dr. Great assumes that creativity in communication leads to solving many issues, and communication is productive only in those cases when two sides are active in communication because not only professors who teach but, in their turn, students influence teaching:

> My career requires that I also continue to engage in the hard work of re-examining my beliefs as our profession works to advance our collective knowledge and improve our practice. As I make myself available to students both within and outside of the classroom, I am continually reminded that although I may be regarded as an expert and the one who assigns grades, my students also bring invaluable experience to our classroom. They have experiences that I do not. By sharing their experiences, students expand our academic conversations in new directions and make important contributions to the learning environment. Promoting an atmosphere of mutual trust and respect is important to me as I support my future colleagues on their journey to become competent and confident [specialists].

It is a must to get acquainted with ratings of students in the North Valley University, according to professors. Some more advanced teachers ask students to provide comments on their teaching if they want to. Professors explain this by their desire to improve the process. As it was mentioned above, very often students write that a professor was "awesome" or "knowledgeable" or "charismatic." It also happens that comments are of negative character. Dr. New states that she has a double feeling on ratings. Despite of this, the fact that personality of a professor is a significant factor in the process of transferring knowledge is true. Good professors try to serve a student by engagement, empathy, or respect. Dr. Bright recommends to treat students with respect. She remembers witnessing "bad" teachers, "Many of the latter were—I hate to say it—bullies or intensely arrogant."

Though the research did not present discussion of issues in the routine format but it sounded like a debate when academics presented opposite opinions on the matter of what activity was more important, researching in the scientific fields or teaching students. Opinions divided. Some academics consider that their strength is research, research is more important because it enriches science. Professor Clever, for example, plans to reduce a workload (teaching) reduction and gain "more opportunities for cross-disciplinary teaching, research, and publishing work." Others have an opposite point of view; they state that brilliant professors are not necessarily at the top of their research but they are very good instructors. But the majority agree on the opinion that the university needs both, perfect researching skills and mastering in knowledge transfer to their students.

Inseparable competence of the North Valley staff is publication. The books and articles presented as artifacts show that their findings are correlated to their researches in the specific fields. A distinguishing feature of the publications is their connection to the process of teaching and learning. They describe how engagement of students in the research or heated discussion in class influences development of critical thinking abilities in the student cohort.

While analyzing data, this researcher constantly noted the interdependence of concepts. Examples are multiple. Elements of professional competence are related to the elements of other academic competencies but they are noticeably concentrated on the relations between teaching and learning. Educational elements are inseparable from the elements of professional competence because the process of teaching/learning described above would fail without a teacher who does not only instruct others but also learns himself/herself. Motivational elements are, definitely, related to the elements of professional competence such as methods of teaching or communicational such as empathy and others. Communicational elements present a picture of the teaching/learning process in relationship. Student success is impossible if a teacher does not initiate proper communication. The interdependence between teaching and learning looks obvious. The elements of personal competence are not separated from the elements of other competences because they all together lead to student success, retention in school, and entering a future career. Research competence elements are connected to many other elements in the system of academic competence but they also serve as a bridge between teaching and learning. Publication competence is related to the research and experiments, and many of them involve students.

As it was mentioned above, on the basis of comparing concepts incorporated into the theory of academic competences (Blašková et al., 2014), three major themes (or subcategories) formed—Awesome teacher, Star student, and process of Wisdom. The Awesome teacher subcategory presents a teacher who is educated to teach university students, academically competent, teaches effectively to get perfect student's outcome, engages students into the teaching/learning process, has all the resources available or can locate them immediately, and knows how they are organized and systemized. Thus the notion of an awesome teacher is crystallized. This notion also presents an answer to the question asked in Chapter Three what an expert teacher, or a connoisseur of teaching means. The researcher created a formula for this subcategory. It is called "Awesome tteacher" with an extra "t" to decipher the meaning of the phrase that emerged naturally. It is a succinct representation of the mentioned characteristics: American wise engaging students operational method of teaching through education, academic competence, high excellence, and research.

A = American
w = wise
e = engaging
s = students
o = operational
me = method of

t = teaching
t = through
e = education
a = academic
c = competence
h = high
e = excellence
r = research

"Star student", another subcategory, is an excellent, successful student, reaching the goal of being educated to serve the family, community, and country. The phrase "Star sstudent" with an extra "s" is a formula: successful, talented, active, retained in school student through ultimate desire to get education, (k)nowledge, and training.

S = successful
t = talented
a = active
r = retained in
s = school
s = student
t = through
u = ultimate
d = desire to get
e = education
n = (k)nowledge
t = training

These two subcategories are connected by the subcategory of teaching/learning process called Wisdom by the researcher. The stages of teaching go along with stages of learning: a student learns—and an instructor learns; an instructor teaches—and a student influences the teaching. The researcher identifies six consequent steps in the teaching/learning process. Students with different abilities move from step to step with different speed. All steps are mandatory. If a student cannot come to a simple decision, he/she is not able to perform a more complicated assignment. But when a teacher supports a student in being successful at every step, this collaboration makes a learner a totally successful star student. To understand the researcher's suggestion better, she created W I S D O M scheme that resembles Tree of Knowledge, a classical symbol of learning. Comparison with a tree both visually and mentally clarifies that like climbing a tree is going from branch to branch, the same is with learning—going from the bottom

to the top step. The W I S D O M model incorporated in the scheme presented later in the paper shows how mutually dependent are teaching and learning and how teaching impacts student learning. The discussion of subcategories will be presented later in the text of this chapter.

The subcategories labeled Awesome teacher, Star student, and Wisdom process present themes leading to the core category—teaching/learning relationship. They are interdependent and interrelated. Reflecting the process of educating undergraduate students in the universities of the US, they describe the aspirations of students when they join school, the process of study provided by the professoriate, and their relationship. The relationship concept was presented in analyzing every competence as it was mentioned earlier in this chapter. Before presenting the theory, the researcher provides interpretation of the subcategories.

Awesome teacher. This category gets its label from multiple mentions of how students call professors with excellent performance, in the sense that they provide students with meaningful knowledge and skills, care about them, engage them in the process of transforming subject content, and conduct interesting lessons. Professors in the study call themselves successful when their students are successful (name of a professor here). To be successful is not easy because many professors, in this study, eight out of twelve, do not have pedagogical education. The American system of higher education does not require that professors should have pedagogical education as it is in other countries that consider pedagogical education mandatory for the university professors. This was discussed in the Literature Review by Drucker (1992) whose opinion was that teaching is easy even for an average person with an "in-born" gift. Though later Drucker

predicted that, within time passing by, a university teacher will need to be specifically educated. This research shows that the time came. The interviewees confirmed that their teaching issues were caused by lack of education or insufficient preparedness. There was not even one professor in this research who would resist learning to teach like it was described by McCaughtry (2004). On the contrary, teachers complained that they have only small opportunities to be taught how to teach. They said "small" because even when some teaching centers exist, Dr. Nobel repeats after Rhoades (2012), "the staff have little experience and express inability to work with professors individually."

The North Valley professors shared a variety of methods that they utilize in their activities. Every time they stressed the fact that they reshape methods to meet student expectations to become successful in school and in the future career. Dr. Witty insists that "better teaching quality means more students succeed." In every interview, teachers like Dr. Bright admitted that both teacher' diligence and students' efforts contribute to quality of the process. Teachers may learn how to be more qualified from their experience.

> I think that good teachers never stop also being good students. Each individual class, each week, each month, each semester provides an opportunity to bring what you have learnt from the previous class, etc. and from knowledge gained in the meantime into the classroom. (Dr. Bright)

The researcher put it as a goal to investigate why students retained or did not retain in school during the second and third year of study. Some professors blamed themselves for "bad" teaching but others noted, "retention of a student in school depends on the teaching quality only partially because a student is responsible for his/her success including grades even more than a professor" (Dr. Witty).

Based on the suggestions of professors to make pragmatic changes in the educating system and to systemize teaching methods that they already practice in their

universities through academic competence and research, the general method of teaching is supposed to be genuinely wise in the American way because it would operate in interests of all users – students, professors, families, and communities.

Star student. This label for the category originates from teacher's descriptions of how students respond to their pedagogies. Students may become successful when they utilize their natural talents; but if they are average, they need the instructor who engages them in activities, works with them individually, and recommends them useful resources. Dr. Witty assumes that "for high-achieving students, their individual ability can be enough. For less accomplished students the quality of teaching becomes more important." Quite important for reaching the goal of using their knowledge and skills acquired in the university in their careers and serving the family, community, and country is motivation. Professor Wise succinctly formulates, "We prepare students for life, not only for career." Such attitude proves that relationship between teaching and learning is direct. To motivate all students simultaneously is challengeable because the classes are usually "uneven" when they consist of excellent and gifted students, average but hard-working and active, or average but negligent and passive. To challenge such circumstances, teacher's motivation enters the arena. But the desire to motivate students does not appear every time in everyday process. Dr. Clever admits that it is easier to compromise with students or "fix mistakes I make in my own pedagogy" than to "work with apathetic or lazy students. I'd rather have a classroom full of hard working but average students than a classroom full of self-important, arrogant, and lazy students who expect to skate by. I can work with the former; I don't like working with the latter." Meticulous teachers find ways to motivate students starting with

simplest—to cause interest. Dr. Wise recommends this as the first step to make student engaged and active. Successful teaching works for successful learning when students gleam with the ultimate desire to continue education in the university.

Wisdom process. This section starts with the table showing the process of learning with the description following:

Table 10

Wisdom process

Teaching/learning	Teachers	Students
M	motivate students	motivate themselves
O	orchestrate experience	offer the best solution
D	develop training	discuss better solutions
S	stay in control	study
I	interact	imagine
W	work	wonder

As it was discussed earlier, the process of learning goes along with the process of teaching. Undoubtedly, the central "actor" in the game of teaching/learning is a student because he/she comes to school to be educated, but it becomes impossible to make

him/her successful if a professor is either passive or lacks competence. The researcher created formula to reflect the process. W I S D O M or formula is verbally explained here: ***W***—Work (teacher presents a problem and shows the way to solve it)—Wonder (student wonders if he/she can solve a problem); ***I***—Interaction (teacher initiates training exercises)—Imagination (student imagines that he knows how to solve a problem); ***S***—Stay (teacher stays in control to check if student's solutions are correct)—Study (student continues to study); ***D***—Development (teacher develops more complicated assignments)—Dialogue or Discussion (student speaks in a dialogue with a partner or discusses with the team how to find a better solution); ***O***—Orchestration (teacher orchestrates experience by offering more opportunities)—Offer (student offers best decision); ***M***—Motivation (teacher motivates a student to demonstrate free command of the acquired knowledge—student motivates him(her)self). This formula may be modified or adjusted but it is needed to systemize phenomena that already exist in the university practice but not systemized. Dr. Great shares her teaching techniques:

> Students engage in small group discussions about their readings guided by open ended questions, lead class activities to introduce assigned readings, interview leaders in the field, attend university presentations outside of class, and write about how theory and research apply to the real world. This example is perfect but it does not give an opportunity to understand in what order these engagements are conducted, and at what level students are at the moment. Good system is necessary. The relationship between the three main themes—Awesome teacher, Star student, and Wisdom process of teaching—leads to the core category—teaching/learning relationship that is represented in Figure 5 below:

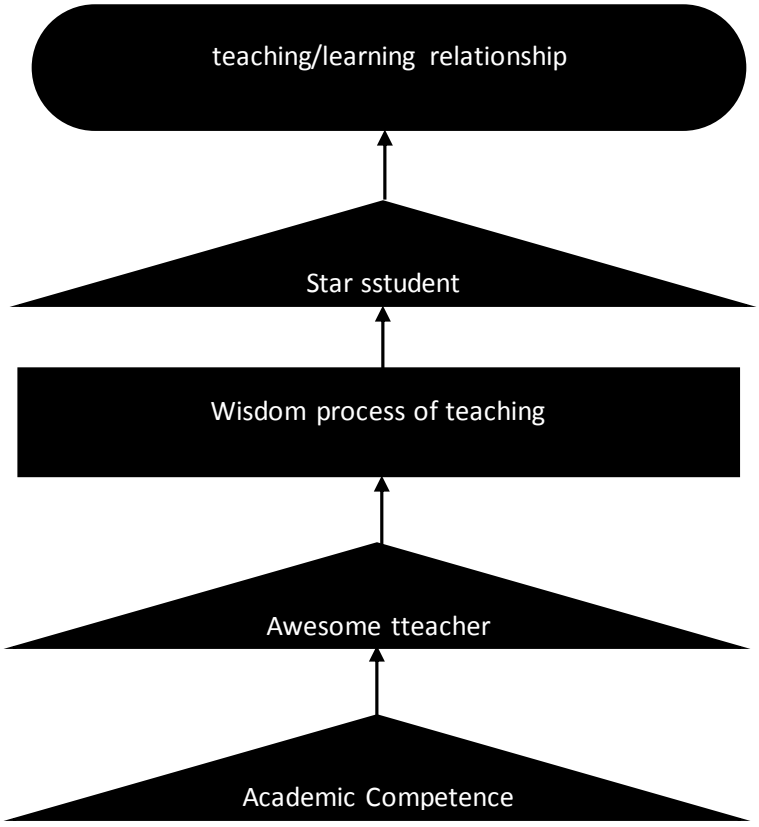

Figure 5. Core category—teaching/learning relationship. The figure illustrates relationship between three subcategories resulting in the core category.

Results and Interpretations

In Chapter One, the researcher stated the problem in the following way: Given the growing demand for meaningful and relevant teaching in four-year universities, a description is needed of what pedagogies are currently practiced by faculty members and how they consider reshaping those teaching methods. After study, the researcher considers that pedagogies practiced by faculty members are described. There

is a distinct vision how professors work, what methods they use and how they reshape them to meet the demands of the main client, a student.

Three themes to attribute to the emerging theory were formulated: Awesome teacher, Star student, and Wisdom process. Their relationship defined a core category – teaching/learning relationship. The researcher considers presenting her grounded in data theory appropriate at this point. There are eight main principles of this theory:

1. Communities need qualified specialists with higher education.
2. Universities and colleges need qualified staff to prepare students for future careers and job placement.
3. Teaching affects students' success (achievements, retention, and outcome) as one of the coherent factors integrated with other factors.
4. To achieve excellence in teaching, professors have to be armed with academic competence, teacher's education, abilities and skills to engage students in the learning process, teaching resources at hand (available immediately), and contribution of the research into the teaching process.
5. All the mentioned elements have to be mandatory for the professor to be assigned.
6. The professor's goal is to reach the highest level of perfection in teaching.
7. Emphasis of excellence in teaching is focused on the support of the most favorable relationship between professors and students demonstrated in productive engagement and focus on student-centered attitude.
8. Uniform excellence theory is flexible that means constant updates, additions, and amendments.

Uniform excellence in teaching is holding balance between teaching and learning that leads to the outcome when students become connoisseurs of the subject, degree graduates, and skillful professionals. The researcher calls her theory Uniform Excellence Theory because the researcher expects that an excellent academic will hold both, his university uniform and constant mastery. Such name corresponds to the dictionary meaning of terms and researcher's vision of the educational system in the United States.

The formula for the Uniform Excellence Theory is Awesome teacher plus Star student in the Wisdom process. Scheme below presents model of the Uniform

Excellence Theory as Curved Bench without an end—meaning that reaching perfection does not have an end, and a six-cornered star presenting a Star student in the process of learning

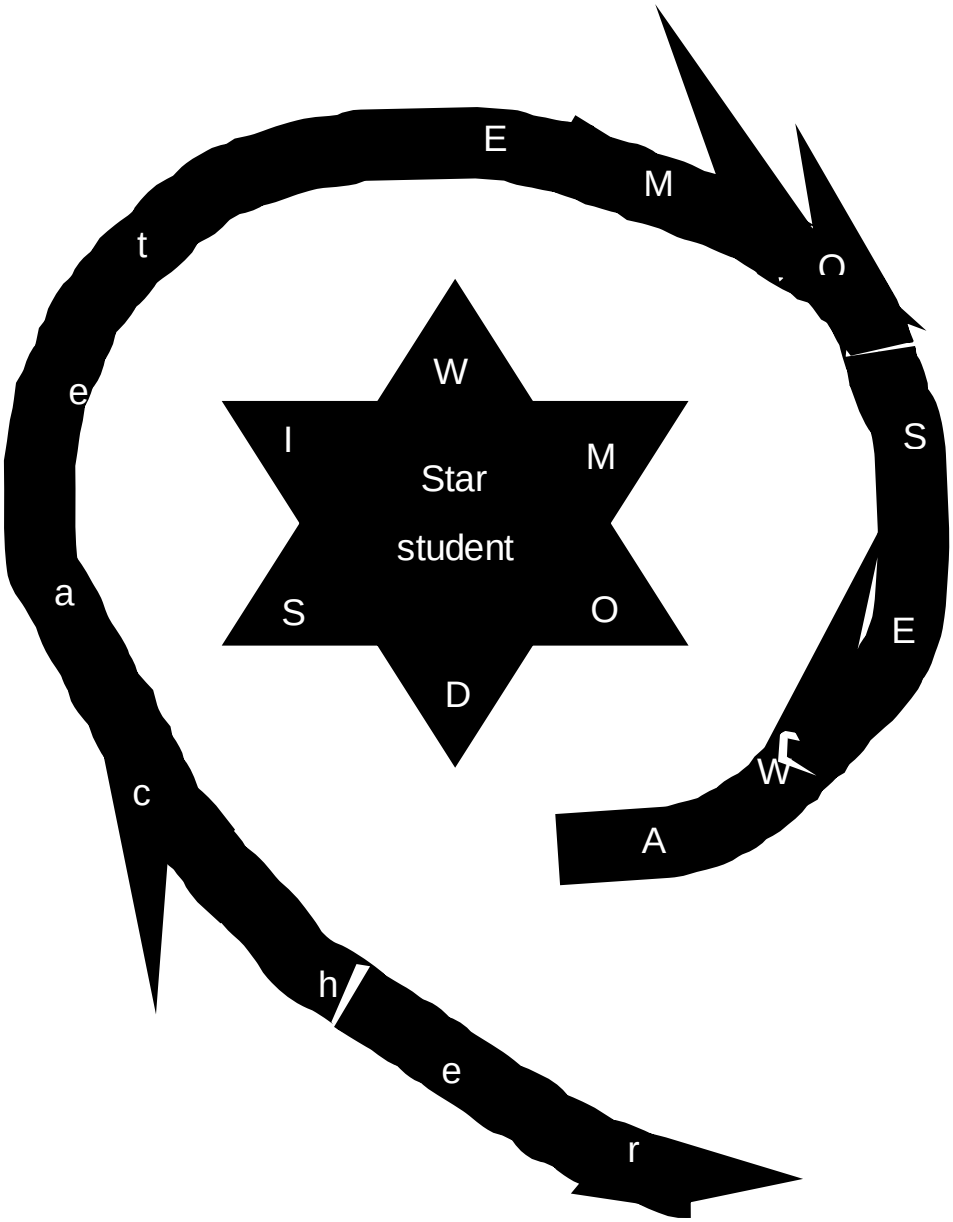

Figure 6. Formula for the Uniform Excellence Theory. The figure illustrates the main idea of the grounded theory—Awesome teacher plus Star student in the Wisdom process is equal to successful teaching/learning.

Summary

This chapter presented the researcher's story of the data collected during the study that included interviews with the North Valley professors and artifacts demonstrating their teaching activities; data analysis; transforming concepts into subcategories and coming to the core category of the relationship between teaching and learning; and description of the principles of the Uniform Excellence Theory. The researcher also presented schemes on which the theory was better explained. A new theory was fully based on the descriptions of the participants. This drew a picture of how teachers in the university educate students for the latter to become successful professionals with a package of skills and decision-making attitudes.

Chapter 5: Conclusions and Recommendations

Introduction

University students' engagement in learning in the higher educational establishments has become a concern of policymakers. Low engagement in studies caused lower than expected retention of students in school. Multiple factors affect student success. The purpose of this study was to generate a theory that would explain the influence of academics' pedagogies on the university students' engagement in learning as one of the factors. The central problem was that, given the growing demand for meaningful and relevant teaching in four-year universities, a description was needed of the pedagogies currently practiced by faculty members and how they consider reshaping those teaching methods to respond to student engagement challenges. This study focused on providing the answers to the questions that caused the study about teaching methods, how they affect the success of students, and what resources were available:

(1) What teaching methods are the faculty members using to provide meaningful and relevant teaching for students?

(2) How do faculty members describe student responses to pedagogies that bring meaning and relevance to learning?

(3) What professional development resources do faculty believe would facilitate reshaping their pedagogies?

A grounded theory approach led to findings about pedagogy that is responsive to and creative of student engagement, retention, and success. The research

method is felt to be selected appropriately because the Uniform Excellence Theory is grounded on the views and perspectives of the university professors.

The investigation of teaching methods demonstrated that professors' philosophy likewise teaching methods and techniques were focused on students as central figures of the teaching/learning process. All interviewees confirmed their readiness to change, adjust, or reshape their methods to satisfy students' needs. Their teaching philosophy included many methods that, in general, represent a student-centered method. The study identified risky areas that could hinder successful learning. Professors, in majority, lacked pedagogical education and needed help when an unfavorable situation emerged. They had to get advice emergently either from colleagues or scarce resources. Though some universities created programs of assisting instructors, it was not every time that the staff were professionally prepared to help them. The study showed that there was not distinct comprehending of an approach, method, or technique terms. The researcher relates such an attitude to the insufficient pedagogic education that would provide prospective university professors this specific knowledge. The investigation also showed that the university administration used to increase number of students in the groups that causes decrease of the opportunities to work with them individually, engage students in more training exercising, and motivate them appropriately. The investigation found out that students responded more positively in cases when they were involved in the teaching/learning process, and they had negative response to the pedagogy when it was not directed at their needs, they were not appropriately motivated, did not receive the grades they expected or lost interest to the subject.

The population that was relevant to the problem of this research included university professors working with undergraduate students. The participants were professors teaching sophomores and seniors because the literature proved that retention of students after the first year of studies is high. That was the reason for considering more concentration on senior undergraduates because retention drops significantly during the second year and later. Twelve professors participated in this research. All the professors were Doctors of Philosophy. All of them had experience of working with undergraduates. Among them were people with about twenty or more years in the career and novices. For the goal of getting acquainted with the pedagogical expertise in the subject, the professors were drawn from different departments. The interviews were of intensive character. The researcher also used such method as collecting artifacts.

Analysis of findings was conducted though comparison of the data after each interview, and after a group of interviews. The theoretical saturation was achieved after the eleventh interview. One more interview was conducted for an extra check during which no new attributes were discovered. Through understanding that a core category was relationship between teaching and learning, the following themes appeared on the surface: Awesome Teacher, Star student, and Wisdom process. Detailed description of the themes was presented in Chapter Four. Based on interpretations, a vivid theory of "Uniform Excellence" was formulated. Chapter Five presents findings of the investigation, their interpretations, answers to the problem questions as the response to the policymakers who asked to do more research on the problems of student engagement and retention, and also recommendations to further studies and possible changes in the system of higher education in the United States of America.

Conclusions

Analysis of the gathered evidence from Chapter Four shows that higher education in the United States is changing. At the same time, the changes are initiated by individuals involved in the teaching/learning, academics and students. Institutions attempt to investigate why the engagement and retention of students is lower than desired. The educational authorities call for help. The researcher for this study makes it a point to contribute to the solution to the existing problem. There were three themes that emerged, *Awesome teacher, Star student, and Wisdom process* respond to the research questions raised before the study:

Research Question One: What teaching methods are the faculty members using to provide meaningful and relevant teaching for students?

This study focuses on the ways that university professors may gain quality professional skills that meet the requirements of satisfying students' expectations and influence baccalaureate student retention. The focus is on the individual level of fostering quality teaching. Theoretically, quality as explained in Literature Review, is "the use of pedagogical techniques to produce learning outcomes for students" (Henard & Roseveare, 2012). Success of students is understood differently in different epochs. As of today, university professors have to adapt their teaching skills to the demands of students enrolled in the American universities who have witnessed a recession and have an exact plan of how to use their university education in their work search, work performance, and positive outcomes. Teaching skills that are expected by students should be effective. Effectiveness consists of many elements, the first being quality. Quality teaching in this study means both, professor's ability to impart knowledge and prepare a student for the

career, or life (Dr. Wise). The goal of students to be successful and the goal of professors to center student are overlapping. Professors are open to students' demands and ready to adjust their methods and teaching technique. Experience of professors to teach and experience of students to learn show how communities of understanding form. For example, when an instructor focuses students' attention on the grade and sees only students' responsibility for it, students become frightened and locked. But if a professor supports students by overall engagement, individual help, and motivation, not only gifted but also average students gain good results. The study witnessed many situations when overlapping of mutual interests led to success.

The classic example is using a traditional teaching technique such as a lecture. There is no doubt that a lecture is a teacher-centered technique to transfer subject content. Today, it is very risky to use a lecture as it is defined because modern students lose interest quickly. This leads to loss of communication. All professors in the study shared their experiences of adapting the lecture teaching technique to the critical thinking approach when students, by a set of critical evaluations, come to decision-making. Thus students reach the same goal but in a different way - the professor orchestrates the activities but the professor is not centered anymore; the leading "actor" is a student. Interaction between a professor and students, and between students affects the results positively. Professors communicate with the new generation, a generation of decision-makers who rely on themselves. This is the reason that teachers need to reshape their approaches, methods and teaching techniques to involve and engage students. According to Dr. Wise, "participation equals achievement." But the researcher learnt about professors who did not bring students to the positive outcomes because they lacked

professional skills. Though they tried to engage students, the engagement was just an activity because there was minimal or no progress in understanding how the problem might be solved. In such situations, communication did not happen because not all elements—"empowerment, expression, inclusiveness, participation, and student-centeredness"—suggested by Bauer (2008) and mentioned in the Literature Review were present.

Many authors mentioned in Chapter Two stated that the information on preparing a university professor to teach is scarce (Graffam (2007); Wankat (1999), and others). The question arose during this investigation how academics are prepared to teach. The majority of professors admitted that they lacked education on teaching others. They were learning how to teach in the process of teaching either from their colleagues or by their own experiences. Professors suggest the need of being educated. According to the literature, teaching programs are only mandatory in several countries of the world. One of the interviewees who had received pedagogical education it in one of the countries mentioned earlier provided several examples of professional teaching where the students easily "climbed the tree of Wisdom". To provide meaningful and relevant teaching for students, knowledge of key points is necessary. Otherwise, a professor relies only on the own experience and reacts slower to challenges of the teaching/learning process as this study demonstrated. Based on the findings, the conclusion is the following: changes in the American attitude from "anyone can do" (Boyer, 1990) teaching to the teaching education as highly needed is noticeable. The results show that those with education are more prepared to teach and share expertise. In his time, Drucker (1968) assumed that the skill of educating others is a feature of "naturals." Frank's (2002) example was Albert

Einstein who was called a "good teacher" in the sense of good service to the student community. In the research, there are many examples when professors are seen as "good" teachers. They read in the student ratings that they are awesome, excellent, outstanding etc. Such ratings inspire professors to continue learning. They express the same idea as Madhavaram and Laverie (2010) who call competence in pedagogy "sine qua non" that means "a thing that is absolutely necessary."

The researcher was aiming to find scientific literature about academic competences and was able to discover a full description of competences performed by the Slovakian authors Blašková et al. (2014). They compiled a scheme of competences for the university professor. The researcher compared competences described in the scheme with competences of the research professors. Many elements coincided. Academic competences may lead to positive as much as to negative results if a professor understands that there is a huge difference between his/her and students' content knowledge. According to the interviews, students resent professors who cannot understand that students may be different from themselves. Literature review mentioned professors who considered that some students are not "fit to be at university" (Biggs & Tang, 2007). Though not many but there were the same opinions voiced in this research about students who fail in school and "may go anywhere." Lack of desire and intention to teach all students in class but only the most diligent leads to apathy of reshaping teaching methods. Buijs (2005) introduced the notion of "a certain level of pedagogical expertise." (p. 333). Biggs and Tang (2007) state that Level One teaching is blame-the-student theory of teaching. Correlating this with the theory of competences, it is evident that not all professors have necessary competences to adjust their approaches, methods, and

teaching techniques. At this point, the communication between instructors and learners is lost. The professor centers himself/herself. If a teacher is effective that is engages students and supports them in all possible ways, students are able to understand the material better and learn more effectively. They move to the center of the teaching/learning process. Several professors from the study confirmed that it does not matter what method or technique to choose – they should work for successful learning. They named many methods – guided discovery, test-teach-test – cooperative learning, problem-based – inquiry-based – and others but they insisted that teaching has to include the opportunity to blend methods whenever it is necessary for a student to acquire more knowledge and skills. The tendency to transform teaching—learning to learning—teaching was evident. AAAS (1989) planned to reform the higher education system basing it on the "scientific teaching," or teaching accepted as one of the sciences. The author of this study intends to contribute to developing principles of "scientific teaching."

Participants raised the question of using innovative technologies. They marked that it is liked by younger students who grew up with the Internet and welcome online learning. This is another time when methods have to be reshaped to reduce teacher's presence and give more independence to students. On the other side, professors complain that though teaching technologies can provide simultaneous learning and engagement even to one thousand students, effective teaching loses its quality. They say that classes have to be smaller for better individualized training. But the universities use the policy of increasing number of students in class causing decrease in quality teaching. Professors adjust their methods but they state that it is an extra step which makes the process slower. They are eager to use methods that involve engagement of all students. Balan and

Metcalfe from Australia (2011) introduced criteria for evaluating engagement methods. They have many elements; the researcher found some in the participants' examples such as applying theories and concepts, making judgement, reading assigned books and more. Professors confirmed that engagement methods are productive. In conclusion, this research partially filled the gap between previous researchers' recognizing that academic pedagogies influence retention of students but not showing that proper command of the teaching methods is a strong factor. Teachers have to transform their skills and abilities to go along with time—to be prepared spiritually, to be technically knowledgeable, and to be ready to work with the new generation of undergraduate students.

Research Question Two: How do faculty members describe student responses to pedagogies that bring meaning and relevance to learning?

Arnold (2010) argues, "Teaching and the student experience are interlocked." Methods discussed in the previous section are important for understanding that teaching is a strong factor to grow a successful student. Literature Review presented a lecture as one of the traditional teaching techniques. The lecture is still current and it is likely to stay in the future. The study noticed that the lectures of the interviewed professors changed their design from the traditional. Students attend more eagerly those lectures that give them an opportunity to participate and interact, lectures that are designed in an interesting way, and are conducted by passionate and charismatic lecturers. These are features described by Revell and Wainwright (2009) who called such lectures "unmissable." It means that students come to listen to them even in cases when attendance is not mandatory. Professors from the North Valley University create many designs of a lecture that are conducted in a masterful manner and attract students, such as

combination of experiments with the explanation of new stuff or demonstrating a video for initiating critical thinking exercises. Professor Sweet named this approach "humanistic." When students become active and are allowed to make an independent decision, they become motivated, get good grades and feel themselves accomplished. As it was mentioned in Chapter Four, teaching/learning process has to be started with causing interest. The researcher wondered if an interesting lecture guarantees that the results will be productive. It is productive when a professor makes sure that that the problems raised in the lecture can be solved by learners. But in case when a professor skips this step and moves to assessment (exam, test, quiz etc.) the value of an unmissable lecture becomes lower or even lost. Putting all the responsibility for the outcome on students makes them demotivated. In their interviews professors insisted on the fact that they observed the strongest motivation when students were supposed to use skills and knowledge in real life situations. Today's students are more pragmatic than previous generations because surroundings such as recent recession or current calls for educated employees affected their life. Instructors, in unison, proclaimed that students' satisfaction is tightly related to their immediate success. One of the examples from the study is when a teacher announced that he would take several best students with him on the expedition to the mountains for solving one of his research problems, students tried to do their best to become members of the team, and their everyday results improved. Pedagogies brought meaning and relevance to learning.

From the interviews, it became known that consistent communication between professors and students led to the relationship of both parties not only to the class and out-of-class partnership but to the life-long bond. Many students returned to the

university to meet their teachers and share stories about successful career and achievements. They admitted that those teachers' charisma influenced their learning and attitudes. They stated that they felt satisfied and lucky to meet such awesome professors.

Discussion about effectiveness of methods includes creating favorable class atmosphere. According to the interviews, when students feel pressure and mistrust, they lose motivation to learn. Not every teacher feels responsibility for losing contact with a student. Several professors admitted that it was a challenge to develop trust or interest. The reason was not lack of care about a student but lack of skills. They were able to find a way to improve the situation but help came only from mentors, colleagues, and scarce brochures. It was not achieved by their preparedness to teach because most of them lacked specific education. The problem does not touch on such rare situations that are so unique that no education or experience helps. Theory Y described in more detail in Chapter Two correlates to this study describing situations of teaching/learning where the created class atmosphere puts a student in the center. The researcher received evidence of the importance of performing more studies about pedagogies directed on student-centeredness, from which experienced and new teachers will know what is good teaching.

The analysis of the data in Chapter Four presented examples of working with diversified groups of students. They may include international students, students from other states, students with different backgrounds and culture, or students who are not similarly prepared for the higher education. They accept teaching differently as in the example earlier in the paper. Relationship between teaching and learning comes forward again. Only teachers can work for assimilation by reshaping their methods and teaching techniques.

Special exploration was performed in matter of teaching Generation Z, or Internet. The professors who disregard the fact that Z-people are quite different, and do not adjust teaching to the interests of learners become ineffective and are not appreciated by students. Though Z-generation praises new technologies, not every school can have them all, which makes students disappointed. Professors in this study heard complaints from students. In its turn, universities have to listen to the most important stakeholders. Gates (2013) warned that lack of modern electronic devices may be one of the reasons that students will leave a school, and retention will become lower. This study did not present even one proof that a student did not retain for the technologies but the changes have to be made. Gates (2013) offered re-inventing the system of education calling it "remedial" education where technologies would be included. Professors mentioned in their interviews that they have courses including face-to-face teaching/learning and online assignments. They also use computers for in-class training. During such classes instructors circulate around the class, provide additional explanations, and also support and encourage undergraduates. Such classes are liked by students better than lecturing or team work because, as it was already mentioned, Z-students choose to study in team when they feel the need. Computerized classes are not boring to them. This type of education, obviously, centers a student. A teacher is present; the role is the same; but the preparedness becomes more complicated. A teacher is not centered during the process. A student has more chances to express his/her personality. This makes students more satisfied. After study, the researcher fully agrees with Gates' (2013) comment that the role of an instructor will be always important, and technologies should serve the goals of education, "This may be the biggest untold story of education technology: When used

properly, technology can amplify the human element in education… The smart use of technology doesn't replace faculty – it redeploys them, to the benefit of the students."

One more problem of student centeredness arose but it was not answered by this study. As it is known from the Literature review, very useful for growth of a student is professional communication between a professor and a student after classes. Though professors gave some hints when they spoke about office hours or classes conducted in a more relaxed atmosphere like in a café or library, there was only slight mentioning about the importance of discussions that are not related to the grade. The history of teaching proves that great ideas are born during a discussion when a teacher and a student have an opportunity to agree or disagree like it was between Plato and Aristotle or in the US. history, between Professor Mark Hopkins and future president James Garfield. In this research, Dr. Sweet shared her experience by stating that meetings outside the walls of the university are very effective. Strong bonding leads to extremely successful learning.

In conclusion, professors stated that students' responses to pedagogies were comparisons of their expectations with the real facts. They make their wise choices when they join the university and expect to receive support from the faculty. Literature did not give a direct response what teaching method is the most effective to realize their expectations. This study presents its vision of the solution: pedagogies that bring meaning and relevance to learning are student-centered, use variety of methods, and may be reshaped or adjusted to the needs of students. Student responses demonstrated that though schools perform a lot of changes it is not enough to meet the requirements of the current changes in school life. Students' vision of teaching connects the principles of universities and the real world.

Research Question Three: What professional development resources do faculty believe would facilitate reshaping their pedagogies?

This study decided that a core category, relationship between teaching and learning, is based on the effective involvement, engagement, and collaboration of both parties, professors and students, in the mutual process. To make this relationship work, instructors use effective methods of teaching. The North Valley professors were not helpless. But they noted that the resources to prepare them for teaching effectively were scarce. They used existing instructional articles and brochures, experience shared by experts, and advise given by family having some pedagogical knowledge and skills. They participated in teaching conferences, short workshops, or attended centers of teaching excellence. When asked what resources they would recommend to novices, they could not provide distinct resources, not for the reason of ignorance but for the lack of resources. Some of them stated that they did not realize what to teach. Others did not know how to teach. It is felt that the problem of resources comes not only because they are scarce and not systemized but also it does from the lack of education leading to the inability of providing meaningful and relevant education.

Literature authors connected educating process with availability of resources because professors support and assist students with pedagogical advice. In addition to the mentioned resources, teachers can turn to co-teaching. One example was presented in this study when an expert teacher assigned as a mentor was leading a novice through the process step-by-step giving a novice the role of a teacher assistant. Henry Ford called collaboration "a success," success in teaching and success in learning, in this case.

Ramsden (1992) stressed the necessity to listen to students and follow their advice as an extra resource. The researcher agrees that it will not hinder to reshape the method if students prove that their teacher's method is not effective but, on the other side, such resource is not certain. Therefore, a professor can rely on it only episodically. It is risky to remain without reliable resources. Professors state that, in the majority of situations, when they lacked resources, they faced a challenge of the professional development.

Crow and Smith (2003) proclaimed that "teaching is, and should be, fun." Many professors from the study, shared that it was interesting to teach but they had to put much effort to be effective. Others shared that they felt nervous and hopeless. To avoid this pressure on the professoriate, universities create centers where more experienced staff consult professors who appear there for advice. In the research, one professor noted that such centers lack professional skills. Therefore, not every dialogue is productive. Instead of fostering development of effective teaching skills, they just lose time.

In addition to the mentioned resources, teachers learn how to use emerging technologies. Nowadays, students use technologies that are emerging every day. If teachers are lagging behind, it creates an obstacle for the mutual communication. To develop communicational competence, many professors search resources to support their technological skills. Though finding resources remains a challenge, the study found out that there are changes because not only faculty but also university authorities work on solving existing problems. The study revealed that it is a challenge for professors to find effective pedagogical resources. It also showed that there is a strong potential supported by the university leaders and faculty.

Recommendations

Before making recommendations of how the educational system of the United States may be improved, in the sense of strengthening relationship between the faculty and students as the main stakeholders, the researcher provides an example of how the suggested grounded Uniform Excellence Theory may contribute to the effective changes. The illustration below explains that to bring up a successful star student, a qualified teacher needs to own multiple competences. The curved bench without an end means that there is no end to perfection. Academic competences need to be applied in the long process of training presented by a Wisdom tree in this illustration. A student has to "climb to the top of the tree" and be successful in every step. The top of the Wisdom tree presents a star student, a person with a free command of the subject. This is a moment of triumph of a professor who skillfully led a student and a student who grasped the subject.

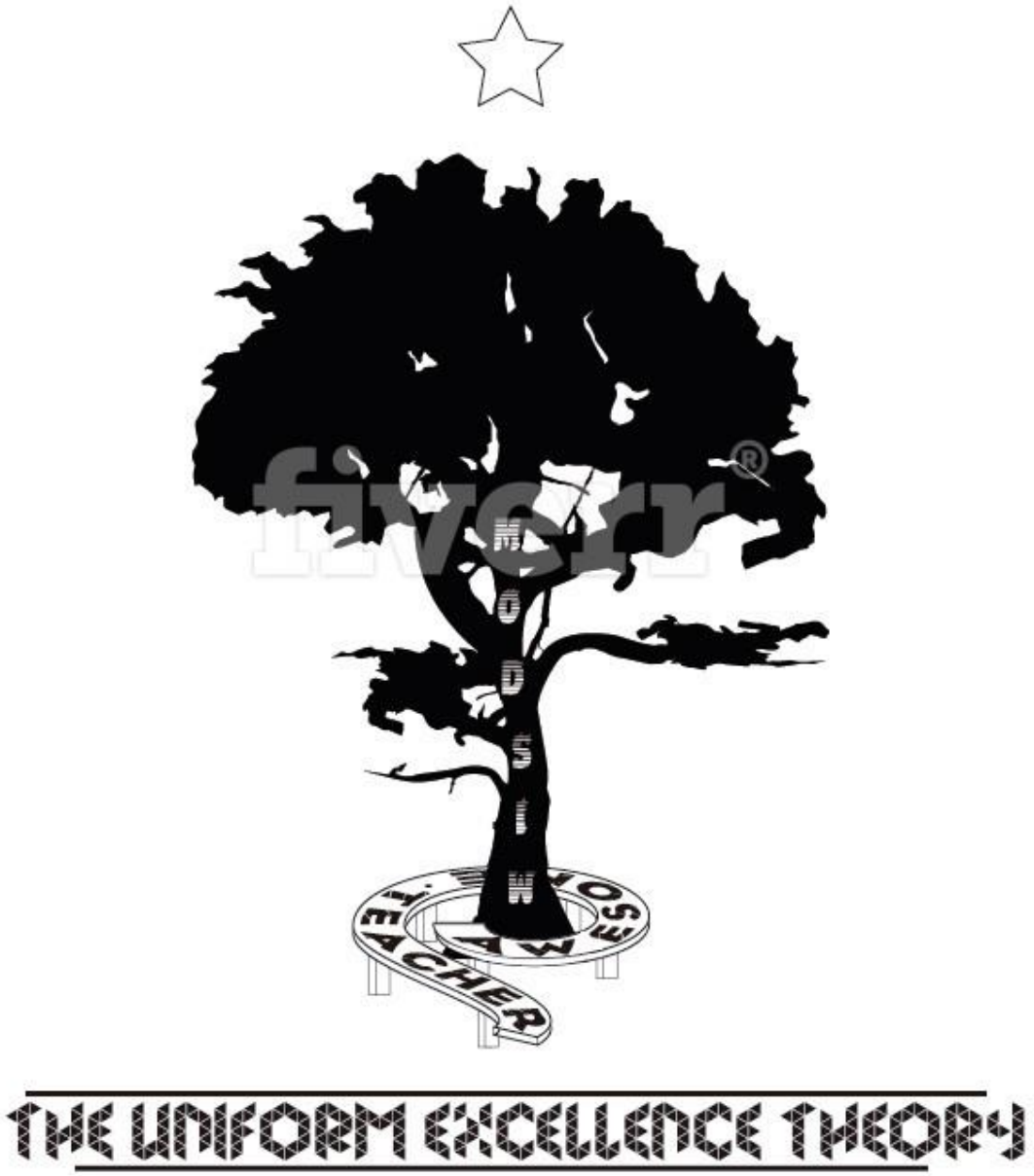

Figure 7. The Uniform Excellence Theory. This figure illustrates the theory stating that successful teaching is successful learning.

The example is from the ESL (English as Second Language) field. Almost every ESL teacher has a Huckleberry Finn in his group who speaks English like that, "I says" or "You don't know nothing about it" (Mark Twain, p. 325). How to teach Huck to use the Present Simple correctly by the scheme that Wisdom tree presents is shown below:

W—Wonder—there is a problem and there is a way to solve it—in this case, learn a grammar rule by using vivid examples which explains when "(e)s" is or is not added (teacher is involved) —e. g. show the action (you read books, she reads newspapers)

I—Imagination—a professor creates developing exercises for a student to imagine that he knows how to solve a problem —or example, fill the blanks, choose the correct answer, spot the odd verb, organize a strip story, test understanding by answering with "Yes" and "No" etc (teacher is involved) —e. g. spot the odd verb (writes, goes, know, likes)

S—Study—more developing exercises lead a student to looking for better solutions—listen to the text and answer questions, make up a story, compile a song etc. (teacher is less involved) —e. g. Listen to a story and answer questions: Lucy's eyes are not very good. So she usually puts on glasses. Today she does not have glasses in the store. So she does not see a young man who likes her. Questions prompting answers in Present Simple: Does Lucy have glasses today? Do you know Lucy? Who likes Lucy? What do we know about Lucy? What do you know about a young man? Do they see each other in the store?

D—Dialogue or Discussion—speaking with the team—use Present Simple in a guided conversation with your group partner or polylogue with your group members (teacher is not involved) —e. g. students discuss what they usually buy in the produce department

O—Offer—offer the best decision—do the test, prepare a lecturette (teacher is not involved at all) —e. g. do the test by writing a story about your day with the use of the Present Simple Tense

M—motivation—prove or motivate why it is the best—correct mistakes if necessary and use Present Simple in free speech (though teacher may be present but it is not mandatory)

Mark Twain described this Huck Finn as a personage from the future, for example, as a representative of a Z-generation. Huck did not like to be taught by a teacher like Miss Watson because she centered herself while Huck always made his decisions independently. He would give preference to an instructor who allows a student to search for the new material on Internet and only supports him by determining what is credible for academia. Huck would collaborate with the group or team (in his case, Tom Sawyer) only when he chose. Shortly, Huck Finn is satisfied when he is centered. By using Internet, he would reach the same goal but more independently and with more dignity. The teacher would play the same role but would be more hidden. The method and techniques, as seen in this example, are not so important because they, anyway, are adjusted to the needs and interests of a central "actor." The success and satisfaction of Huck Finn would be bigger if Huck were motivated to use the Present Simple correctly. For example, it might be love. Huck was moved by goodness of Mary Jane Wilks. He could be motivated to learn grammar better if he knew that they would send letters to each other. In his turn, Huck would need a teacher who meets his demands. Uniform Excellence Theory aims at holding balance between teaching and learning that leads to the outcome when students become connoisseurs of the subject, degree graduates, and skillful professionals.

Recommendations have a purpose to develop the ideas of this research because it is important for the stakeholders to understand that faculty-student relationship is a strong factor of successful teaching and learning.

Recommendations for Further Researchers

1. Give voices to students' opinions. This study involved professors as participants. They presented students' response to their pedagogies. With engaging students in the future research, the data could be richer.
2. Modify research. This investigator looked at the system of higher education in California. Comparing higher education in other states would allow to see a bigger picture.
3. Compare teaching on other levels. This researcher investigated the process of teaching/learning of undergraduate students. Further research may concentrate on graduates and post-graduates. The difference may be on the levels of state and private universities, different or similar departments etc.

Recommendations for Higher Education Connoisseurs

1. Form a group of enthusiasts who will collect studies of the similar character (for example, role of pedagogy for the students' success) and systemize findings. This study findings could be added.
2. Enrich domestic knowledge about academic competences. The researcher used a Slovakian model.
3. Systemize resources and prepare instructive materials on every subject about what to teach and how to teach. The researcher noticed challenges of lack of resources and ways to locate them.

4. Organize regular conferences on teaching in the higher educational institution and inform every professor about materials. The researcher noticed difficulties of the faculty in finding answers to their professional questions.
5. Share examples of excellent teaching with the community. The community experiences lack of information about the events in their neighboring universities.
6. Exchange expertise with the international community. It was noted during the research that American scientists are not apt to consider findings of the foreign science.

Recommendations for Educational Authorities

1. Address the problem of teaching quality and add this problem to the potential education reform. One of the major findings of this study was lack or insufficiency of pedagogical education of university instructors that caused problems with using methods and teaching techniques, communicating with students, and finding resources.
2. Consider possibility of mandatory teaching programs and set criteria for them. The study demonstrated that systemic education of future university teachers is not available. Even dissertation programs do not provide teaching classes.
3. Organize more centers for continuing education. Such centers do exist but they are scarce and experience lack of the advanced staff.
4. Use educational connoisseurs as an intelligent force for providing ideas for the potential changes in the educational system. The Literature on the factors influencing teaching/learning process exists but it is not systemized and organized to address specific questions immediately.

5. Strengthen the role of a teacher educator. The researcher attempted to find how many positions of a teacher educator are available in the American universities. One position was found. Many universities did not have it on the list.
6. Pay attention to the number of students in one class. Classes became larger without accommodation for individual work and using technologies.

Summary

This grounded theory research looked for the experience of university professors teaching undergraduates who by using multiple teaching approaches, methods, and teaching techniques expect to receive positive response from their students. The description of their experience was not presented as systematic, and this researcher attempted to fill the gap. The most appropriate type of research to reach the aim was considered the grounded theory qualitative research. Grounded theory provides for a systematic and rigorous procedure and rich data from the experiences of individuals.

The core theoretical category of relationship between teaching and learning emerged from the subcategories of Awesome teacher, Star student, and Wisdom process. These categories served as a basis for the articulation of the Uniform Excellence grounded theory. Uniform excellence in teaching is holding balance between teaching and learning that leads to the outcome when students become connoisseurs of the subject, degree graduates, and skillful professionals.

This study offers a number of recommendations for further study, educational connoisseurs, and educational authorities. The researcher pointed out that effective teaching aimed at students' success and satisfaction has to be provided by professors with pedagogical education. The question of specific education does not have an answer in the

literature. This study attempted to analyze the collected data on this problem. The analysis showed that professors express interest in being educated but the educational system of the US does not offer many options. Three sets of recommendations include addressing the problem of creating conditions for educating university professors.

In the sense of scholarship of teaching, teaching does not only educate professionals but also attracts future scholars, and builds a strong union of teacher's understanding and student's learning. Professional teaching transforms knowledge, engages students, affects developing their critical and creative abilities, and self-educates a teacher at the same time. In regards of scholarship of teaching, it is confirmed by this study that there is a strong union between teacher's understanding and student's learning. Ancient Latin proverb says, "By learning you will teach; by teaching you will understand."

Keeping a student in the central position of the classroom universe and staying in the shadow, the teacher is the main person to transfer knowledge to the next generation. This study described how a teacher can become effective to grow a successful student by a set of methods, motivation, and own charisma.

Chapter Five draws this study to a close. The findings suggest the combination of the main categories that caused a new theory emergence leads to the understanding that a successful university professor acts as guarantor of successful learning of the university undergraduates. Recommendations necessitate changes in the system of higher education of the US.

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APPENDIX A: INTERVIEW PROTOCOL

SEMI-STRUCTURED FOCUS GROUP/INTERVIEW PROTOCOL:

Successful Teaching Is the Way to Successful Learning in the Higher Educational Institutions of the U. S. A.

Time of Focus Group/Interview:

Date:

Place:

Interviewer: Assia Barysheva

Focus Group Participants:

Questions (list below)

Starting conversation.

I. Initial open-ended questions

1. So far as I understand you have a long (not so long, short) experience of communicating with students. How long have you been teaching?

2. How did you prepare yourself for a teaching career? Did you receive any special education?

3. I am sure that for all these years you have formulated your teaching philosophy. Can you share with me what is the formulation of your teaching philosophy? Do you think you're your teaching philosophy makes you a better teacher? If so, why?

4. How would you define your teaching position – a teacher, a researcher, a lecturer, an instructor (more)?

II. Focused questions

1. If you use a teaching method, is it easy for you to reshape or modify it to satisfy needs of some given group of students? What is your attitude?

2. Vygotsky said that a child needs help a more capable instructor to go to the next level of development. Our professors need to use this scaffolding theory to become successful in teaching students. How would you interpret this idea for teaching students in the university because Vygotsky was discussing teaching children?

3. Do you consider teaching quality a strong factor to keep a student in the program?

4. Do you feel that a grade of a student is your concern? Is it a responsibility of a professor to create a good student?

5. What is usual (approximate) percentage of students that do not finish your class satisfactorily?

6. What affects quality of learning more – students' attitude and diligence or professors' skills of involvement and teaching?

7. Do you know how students rate you? Do you change your methods after you see students' comments in rating?

8. What is your way to work with a student individually?

9. Do you have sometimes such teaching problems when you need help, advice or instruction?

10. Is there any course or book that you would recommend to novice teachers?

III. Ending questions

1. Do you ask yourself: What else do I need to know? How will I find a resource to help me?

2. How do you foster your teaching to satisfy theoretical and practical application of the knowledge?

3. Do you feel that you need to continue learning, and if so why? Or why not?

4. Think about the next stage of your career. Tell me what you think this will be like.

5. What comments or questions do you have for me? Is there anything you would like me to explain? What would you like to tell me that you've thought about during this interview?

IV. Ending the conversation – expressing gratitude, discussing procedural details, agreeing on possible follow-up.

APPENDIX B: PARTICIPANT LETTER OF INVITATION

Appendix B: Participation Letter of Invitation

(date)

Dear _____,

I am writing to invite you to participate in a research study Successful Teaching Is the Way to Successful Learning in the Higher Educational Institutions of the U. S. A. The purpose of this grounded theory study is to generate a theory about the relationships between university professors' pedagogies and students' engagement in learning. This study is being conducted as part of the dissertation requirement for my Doctoral Degree in Educational Leadership and Management at Drexel University under the supervision of Dr. W. Phillips, Principal Investigator and dissertation Supervising Professor.

If you choose to participate, I request to conduct a one-to-one interview lasting about 45minutes. For the purpose of data collection, I ask that I be permitted to audio tape the interview and take handwritten notes through the process.

Participation in this study is completely voluntary. All participants will remain anonymous, and you are free to decide not to participate or to withdraw at any time without consequence. There are no known risks and/or discomforts associated with this study.

Please keep in mind, that participation of the interview is not a requirement and that any information provided to this interview will be kept highly confidential.

If you have any questions, I would be happy to talk to you in more detail. I can be reached at phone 530-228-0546 or by email at ab3329@drexel.edu. You may also contact the Principal Investigator: Dr. Phillips, Drexel University, School of Education, by phone 252-916-8833 and by email at jp3467@drexel.edu.

Thank you for your time. I look forward to your response.

Sincerely,

Assia Barysheva

APPENDIX C: PARTICIPATION CONSENT FORM

Participant's Agreement:

I am aware that my participation in this interview/focus group is voluntary. If, for any reason, at any time, I wish to stop the session, I may do so without having to give an explanation. I understand the intent and purpose of this research.

I am aware the data will be used for a qualitative research. I have the right to review, comment on, and/or withdraw information prior to the submission of academic papers to the class course site. The data gathered in this study are confidential and anonymous with respect to my personal identity unless I specify/indicate otherwise.

I understand that participation of the interview is not requirement and that any information provided to this interview will be kept highly confidential.

____I grant permission for the use of this information for academic learning purposes.

I grant permission to use one of the following:

____ My first name only

____ My full name

____ Just a pseudonym

I will be given a copy of the:

___ Paper, ____ audiotape, ____ videotape, ____ transcribed interview,

___ photograph(s)

Additional conditions for my participation in this research are noted here:

I have read the above form, and, with the understanding that I can withdraw at any time, and for whatever reason, I consent to participate.

_____	_____
Participant's signature	Date
_____	_____
Interviewer's signature	Date